



Maryland Annual Economic Analysis Report

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Summary

Maryland's Gross Domestic Product (GDP) continues to be concentrated in the government sector; however, there was strong growth in the private sector from 2016 to 2017. As Maryland's GDP grew, the labor force and labor force participation rate increased, and Maryland's unemployment rate continued the 10-year trend of being lower than the United States' unemployment rate. In Maryland, economic growth was coupled with job growth, with over 24,000 jobs added from 2016 to 2017.

This growth was shared across all counties and a variety of sectors. Workers are poised to benefit from this statewide trend with opportunities for employment at higher wages in growth industries. These industries employ a variety of occupations, available to workers at all education levels, as seen in the Maryland occupations section of this document.

The economic indicators section of this report describes the growth in Gross Domestic Product and the changes in Maryland employment. The labor force and demographics section analyzes the current state of Maryland's labor force, including some details about the demographic make-up of Maryland's workforce and population.

A geographic review of growth industries is included in the local employment trends section. In this section, the top 10 growth industries by over-the-year percentage growth are identified for each county.

This report concludes with a sector-by-sector analysis of Maryland employment and wages, as measured in the Quarterly Census of Employment and Wages. This section also includes demographic information about the employees that work in each sector.

2017 Highlights

- ◇ 24,400 new jobs
- ◇ Employment growth in 14 of 19 Sectors
- ◇ GDP growth of 1.5 percent
- ◇ Government was the largest GDP sector
- ◇ Unemployment rate of 4.1 percent
- ◇ Labor force participation rate of 67.6 percent
- ◇ 18 of 24 counties experienced an over-the-year growth in private employment
- ◇ 77.5 percent of Maryland employment was in services providing industries.

Economic Indicators

In 2017, Maryland's real GDP increased by 1.5 percent compared to 2016 (Bureau of Economic Analysis, 2018). The expansion of Maryland's economy was driven by growth in the manufacturing, real estate and rental and leasing, and health care and social assistance sectors. For the same period, U.S. GDP grew at an over-the-year rate of 2.3 percent (real GDP) (Bureau of Economic Analysis, 2018). Growth in U.S. GDP was driven by real estate and rental and leasing, information, and manufacturing.

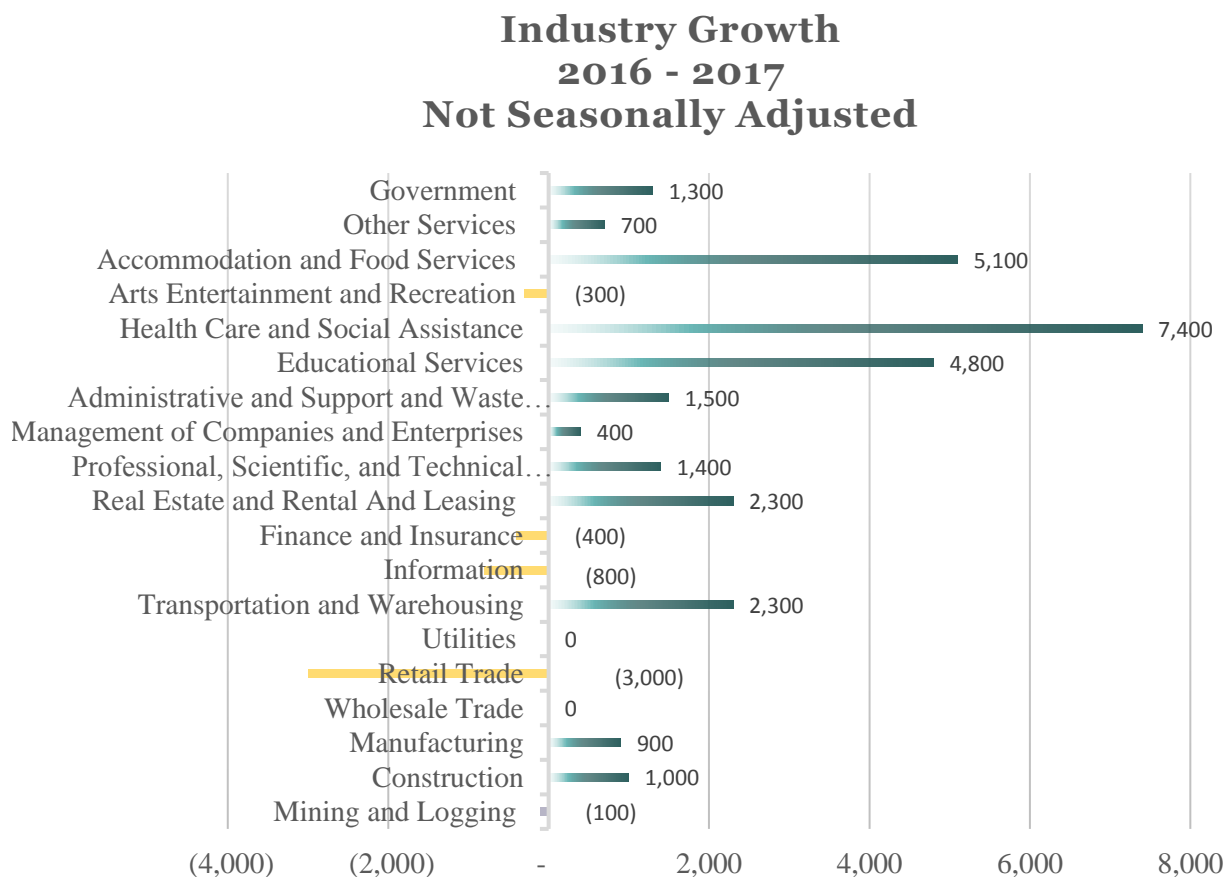
From 2016 to 2017, the distribution of GDP across industries in Maryland remained fairly stable. Maryland continues to have a diverse economy, with government being the single largest sector. This sector accounts for 19.9 percent of 2017 GDP, a 0.3 percentage point decrease versus 2016. Despite government being the largest single sector in Maryland, private industries accounted for 99.0 percent of Maryland's GDP growth from 2016 to 2017.

The largest private industries in Maryland by 2017 GDP share were real estate and rental and leasing, professional scientific and technical services, and health care and social assistance. Real estate and rental and leasing GDP increased by 3.0 percent from 2016 to 2017 and accounted for 33.1 percent of overall GDP growth. Professional scientific and technical services increased by 1.2 percent and accounted for 7.9 percent of total GDP growth. Health care and social assistance grew by 2.1 percent and accounted for 10.1 percent of Maryland's GDP growth from 2016 to 2017.

Maryland real GDP by industry , 2016 – 2017 (millions of chained 2009 dollars)			
Industry	2016	2017	Change
Agriculture, forestry, fishing, and hunting	797	752	-5.6%
Mining, quarrying, and oil and gas extraction	314	408	29.9%
Utilities	6,485	6,348	-2.1%
Construction	14,971	14,735	-1.6%
Manufacturing	19,101	20,469	7.2%
Wholesale trade	14,439	14,666	1.6%
Retail trade	18,362	18,662	1.6%
Transportation and warehousing	6,557	6,596	0.6%
Information	17,198	17,278	0.5%
Finance and insurance	16,389	15,925	-2.8%
Real estate and rental and leasing	57,594	59,333	3.0%
Professional, scientific, and technical services	33,682	34,095	1.2%
Management of companies and enterprises	4,034	4,300	6.6%
Administrative and support and waste management and remediation services	10,536	10,854	3.0%
Educational services	4,305	4,397	2.1%
Healthcare and social assistance	24,971	25,499	2.1%
Arts, entertainment, and recreation	3,285	3,405	3.7%

Maryland real GDP by industry , 2016 – 2017 (millions of chained 2009 dollars)			
Industry	2016	2017	Change
Accommodation and food services	8,307	8,678	4.5%
Other services (except government)	7,294	7,420	1.7%
Government	67,768	67,820	0.1%

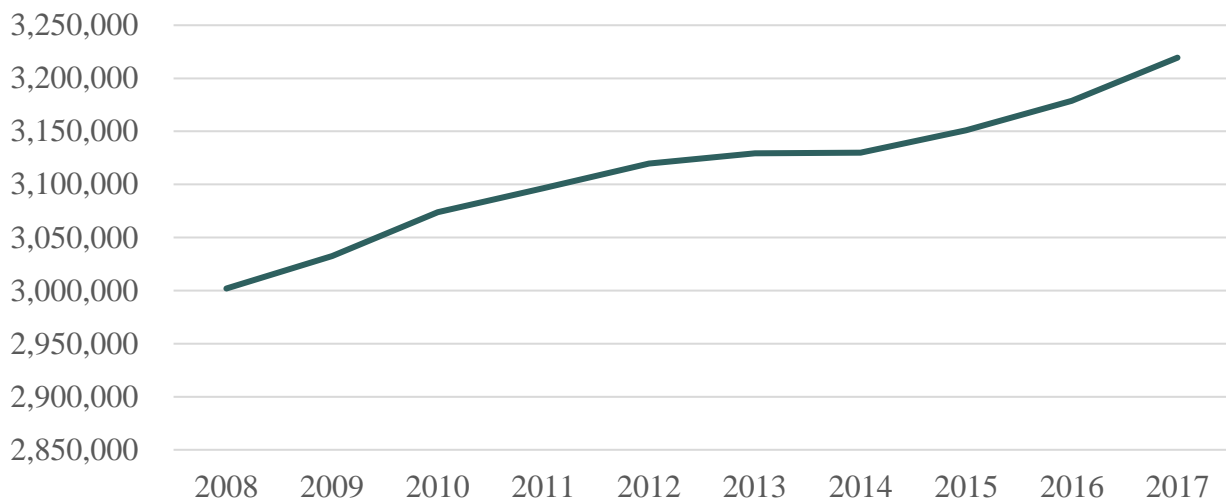
Maryland industries also posted a 24,400 year over year employment gain from 2016 to 2017 (not seasonally adjusted) (BLS CES, 2018). Since 2008, the employment level has risen by 119,200 jobs – a growth of 4.6 percent. Private employment has increased by 23,100 jobs from 2016 to 2017. Since 2008 private employment rose by 103,900 jobs – a gain of 4.9 percent. As seen in the graph below, the growth from 2016 to 2017 was driven by healthcare and social assistance (a gain of 7,400 jobs), accommodation and food services (5,100), and educational services (4,800 jobs). Five sectors lost employment from 2016 to 2017: arts, entertainment, and recreation; finance and insurance; information; retail trade; and mining and logging. See pages 25-57 for a detailed look at each industry sector.



Labor Force and Demographics

Maryland's labor force continued its more than decade-long trend of growth in 2017. The labor force grew by 40,809 workers over the 2016 annual average (BLS LAUS, 2018). The 2017 annual average of 3,219,455 people in the labor force was a 10-year high, with 217,502 more workers than the 10-year low in 2008.

**Maryland Labor Force
Not Seasonally Adjusted
2008 - 2017**

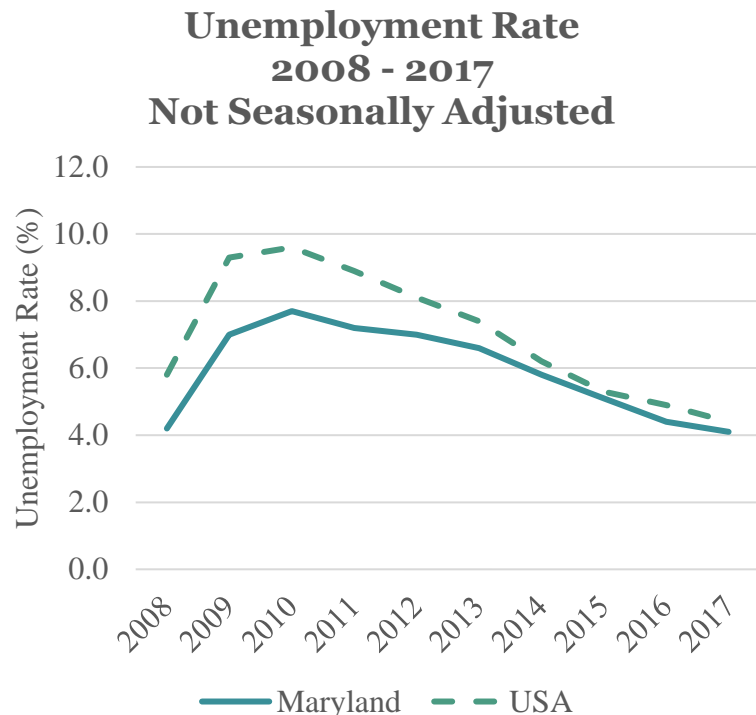


**Maryland Labor Force Participation
Rate
2008 - 2017**



As Maryland's labor force continues to grow, the state's labor force participation rate is rebounding after 10-year lows in 2014 and 2015 at 66.9 percent. In 2017, the labor force participation rate was 67.6 percent, 1.4 percentage points lower than the peak of 69.0 percent in 2009.

Maryland's unemployment rate in 2017 averaged 4.1 percent, 0.3 percentage points lower than the previous year. The unemployment rate in 2017 also represented a 10-year low for Maryland, 3.6 percentage points lower than the 10-year high of 7.7 percent in 2010. The United States 2017 unemployment rate of 4.4 percent was 0.3 percentage points higher than the Maryland unemployment rate. This continues the trend of Maryland's unemployment rate being lower than that of the United States. However, the national rate has been converging towards Maryland's rate over the past 10 years.



Demographically, Maryland continues to be one of the nation's most educated states (ranked fourth), with 39.3 percent of Marylanders holding at least a bachelor's degree (U.S. Census Bureau, 2018). Median earnings in Maryland ranked third in the nation at \$48,147, which may be partially attributable to the higher levels of educational attainment in the state.

Workers in Maryland are typically of the prime working age, as defined by the U.S. Bureau of Labor Statistics: 63.8 percent of workers are between 25 and 54 years old. About a quarter of Maryland's workers (23.9 percent) are above the prime working age (U.S. Census Bureau, 2018). Population demographics indicate that there will be ample individuals available to join the labor force over the next 10 years. People between 10 and 24 years old make up 19 percent of Maryland's population, as compared to 19.7 percent for the U.S. As these people leave school and join the labor force, they will step into vacancies created by workers aging out of the labor force (U.S. Census Bureau, Population Division, 2018).

Maryland's labor force averaged 50.8 percent female workers through the first three quarters of 2017 (U.S. Census Bureau, 2018). This is 0.2 percentage points lower than 10-year highs in 2009 and 2010, where the percentage of female workers was 51.0 percent.

Local Employment Trends

Of Maryland's 24 counties, 18 experienced an over-the-year growth in total private employment from 2016 to 2017. Combined county averages for the state showed an over-the-year gain of 1,013 employees, good for an over-the-year growth rate of 0.7 percent. The six counties (Allegany, Charles, Dorchester, Garrett, Queen Anne's, and Washington) that experienced an over-the-year decline averaged a decrease of 1.6 percent.

County level industry data showed particularly strong growth for Maryland's service-providing industries. Out of 240 identified growth industries, 175 were service-providing, and service-providing industries in total accounted for 82.9 percent of average county employment. Goods producing industries did see a faster over-the-year growth rate of 1.1 percent, compared to service-providing industries' 0.6 percent over-the-year growth, but because service-providing industries made up a larger portion of the economy, a slower over-the-year growth rate still resulted in larger numeric gains in employment.

Listed below for each county are the county's top 10 industries by percentage of over-the-year employment growth from 2016 to 2017. Industries are defined by the North American Industry Classification System¹. Industries with 2016 employment below 75 are excluded.

Allegany County

Industry Name	2017 Employment	OTY %
Broadcasting, except internet	166	39.5
Fabricated metal product manufacturing	105	34.6
Gasoline stations	350	8.4
Miscellaneous store retailers	149	8.0
Truck transportation	305	7.0
Real estate	128	4.1
Insurance carriers and related activities	295	3.5
Motor vehicle and parts dealers	512	3.4
Couriers and messengers	189	3.3
Merchant wholesalers, nondurable goods	121	2.5

Allegany County's top 10 growth industries were dominated by subsectors of the retail trade sector. Three of the 10 largest growth industries were in the retail trade sector. Gasoline stations, miscellaneous store retailers, and motor vehicle and parts dealers accounted for 1,011 of the 2,320 jobs. Fabricated metal product manufacturing was the only goods producing industry in the top 10 growth industries for Allegany County; the remaining nine were service-providing.

¹ For more information on NAICS, and for industry definitions, please go to <https://www.bls.gov/bls/naics.htm>.

Anne Arundel County

Industry Name	2017 Employment	OTY %
Support activities for transportation	1,896	35.0
Food manufacturing	445	25.7
Miscellaneous manufacturing	450	13.9
Clothing and clothing accessories stores	4,985	12.9
Scenic and sightseeing transportation	182	10.3
Furniture and home furnishings stores	1,158	9.9
Rental and leasing services	1,724	9.8
Air transportation	5,098	9.2
Membership associations and organizations	2,907	9.2
Truck transportation	1,635	8.9

Transportation and warehousing drove the growth in Anne Arundel County. Four of the top 10 growth industries were in this sector, accounting for 8,811 of the 20,480 jobs in the top 10 growth industries. Two of the top 10 growth industries were in goods producing, both in manufacturing. The remaining eight were service-providing.

Baltimore City

Industry Name	2017 Employment	OTY %
Motion picture and sound recording industries	292	32.7
Miscellaneous manufacturing	412	16.7
Waste management and remediation services	1,276	16.3
Warehousing and storage	7,323	12.7
Textile product mills	173	11.6
Sports, hobby, music instrument, book stores	471	9.8
Miscellaneous store retailers	1,226	9.5
Management of companies and enterprises	2,262	7.1
Accommodation	3,326	7.0
Furniture and home furnishings stores	466	6.6

Three of the 10 Baltimore City growth industries were in the retail trade sector. These three subsector accounted for 12.6 percent of the employment in the top 10 growth industries. The largest sector represented is transportation and warehousing. On the strength of one subsector - warehousing and storage - this subsector accounted for 42.5 percent of employment in the top 10 growth sectors with 7,323 employees. Two of the top 10 growth sectors were goods producing, miscellaneous manufacturing and textile product mills.

Baltimore County

Industry Name	2017 Employment	OTY %
Computer and electronic product manufacturing	2,170	207.4
Publishing industries, except internet	950	61.3
Support activities for transportation	1,624	27.2
Machinery manufacturing	1,094	12.6
Credit intermediation and related activities	7,072	11.4
Membership associations and organizations	2,112	11.2
Furniture and related product manufacturing	299	10.3
Electronic markets and agents and brokers	991	9.0
Warehousing and storage	417	8.3
Textile product mills	84	7.7

Of the employment in Baltimore County's top 10 growth sectors, 21.7 percent came from four goods producing subsectors: computer and electronic product manufacturing, machinery manufacturing, furniture and related product manufacturing, and textile product mills. However, almost twice the number of employees came from the credit intermediation and related activities subsector of the finance and insurance sector, with 7,072 employees (42.1 percent of the top 10 growth industries' employment).

Calvert County

Industry Name	2017 Employment	OTY %
Accommodation	367	52.9
Merchant wholesalers, nondurable goods	268	15.0
Educational services	177	13.5
Membership associations and organizations	145	10.7
Real estate	209	9.4
Gasoline stations	195	8.3
Insurance carriers and related activities	93	8.1
Miscellaneous store retailers	170	4.9
Professional and technical services	1,084	4.8
Merchant wholesalers, durable goods	242	4.3

Of the top 10 growth industries in Calvert County, none were goods producing industries. The most represented sector was retail trade with two subsectors: gasoline stations and miscellaneous store retailers. The 365 retail employees only accounted for 12.4 percent of the employees in the top 10 growth industries. The 1,084 professional and technical services employees lead the group, making up 36.7 percent of the employment.

Caroline County

Industry Name	2017 Employment	OTY %
Specialty trade contractors	551	20.0
Administrative and support services	186	20.0
Gasoline stations	151	16.2
Motor vehicle and parts dealers	340	8.3
Non-store retailers	194	7.8
Social assistance	124	6.9
Repair and maintenance	186	6.9
Ambulatory health care services	198	3.7
Warehousing and storage	173	3.0
Heavy and civil engineering construction	130	1.6

Three of the top 10 growth industries in Caroline County were in the retail trade sector: gasoline stations, motor vehicle and parts dealers, and non-store retailers. The 685 employees accounted for 30.1 percent of Caroline County's top 10 growth industries' employment. The largest single subsector was specialty trade contractors in the construction sector. This was one of two goods producing subsectors in the top 10.

Carroll County

Industry Name	2017 Employment	OTY %
Securities, commodity contracts, investments	188	36.2
Furniture and home furnishings stores	505	25.9
Waste management and remediation services	522	19.2
Rental and leasing services	210	18.6
Food manufacturing	293	14.9
Telecommunications	137	12.3
Truck transportation	347	10.9
Animal production and aquaculture	141	10.2
Non-store retailers	269	7.6
Health and personal care stores	480	7.1

Retail trade was the most represented sector in the top 10 growth industries for Carroll County. Furniture and home furnishings stores, along with non-store retailers, accounted for 25 percent of the top 10 growth industries' employment with 774 employees. There were two goods producing subsectors included in this group: food manufacturing and animal production and aquaculture. These two subsectors made up for 434 of the 3,092 employees in the top 10 growth industry subsectors.

Cecil County

Industry Name	2017 Employment	OTY %
Warehousing and storage	1,233	48.2
Administrative and support services	856	13.2
Truck transportation	884	9.1
Merchant wholesalers, durable goods	256	8.5
Transit and ground passenger transportation	178	7.9
Crop production	587	6.5
Mining, except oil and gas	98	6.5
Miscellaneous store retailers	166	6.4
Building material and garden supply stores	376	6.2
Ambulatory health care services	1,222	3.5

Three of the top 10 Cecil County growth industries were in the transportation and warehousing sector. The employment in these three subsectors was 2,295, accounting for 39.2 percent of employment in the top 10 Cecil County growth industries. Two of the industries were goods producing: crop production and mining, except oil and gas.

Charles County

Industry Name	2017 Employment	OTY %
Management of companies and enterprises	124	12.7
Administrative and support services	1,192	12.1
Specialty trade contractors	2,984	9.7
Merchant wholesalers, durable goods	288	5.1
Gasoline stations	229	5.0
Beverage and tobacco product manufacturing	89	4.7
Nursing and residential care facilities	983	3.6
Health and personal care stores	473	3.5
Miscellaneous store retailers	300	3.4
Truck transportation	150	3.4

Retail trade accounted for three of the top 10 growth industries in Charles County. There were a total of 1,002 retail workers in these three industries: gasoline stations, health and personal care stores, and miscellaneous store retailers. The highest employment came from specialty trade contractors, a goods producing sector, where 2,984 workers were employed. There was one more goods producing industry - beverage and tobacco product manufacturing - for a total of two out of 10 industries from the goods producing area.

Dorchester County

Industry Name	2017 Employment	OTY %
Fabricated metal product manufacturing	424	86.0
Repair and maintenance	96	28.0
Food and beverage stores	279	9.4
Merchant wholesalers, nondurable goods	198	8.8
Amusements, gambling, and recreation	164	2.5
Administrative and support services	96	0.0
Food manufacturing	1,643	-0.4
Crop production	92	-1.1
Motor vehicle and parts dealers	101	-1.9
Insurance carriers and related activities	101	-1.9

In Dorchester County, only six industries had a positive growth rate in 2017, and thus the four industry sectors with the lowest decline were also included in the top 10. Dorchester County's top 10 growth industries were goods producing dominant, with three goods producing industries making up 67.6 percent of the top 10 total employment. The three industries were made up of two manufacturing subsectors, and the agriculture, forestry, fishing, and hunting subsector. The seven service subsectors were made up of two retail subsectors and five other service-providing subsectors.

Frederick County

Industry Name	2017 Employment	OTY %
Support activities for transportation	123	24.2
Wood product manufacturing	240	15.9
Heavy and civil engineering construction	601	13.8
Miscellaneous manufacturing	111	13.3
Beverage and tobacco product manufacturing	277	13.1
Crop production	87	13.0
Social assistance	1,838	9.5
Construction of buildings	2,510	8.2
Sports, hobby, music instrument, book stores	854	8.1
Educational services	2,344	7.9

Frederick County's top 10 over-the-year growth industries were split 6-4 in favor of goods producing industries. However, overall employment was concentrated in the service-providing industries, led by healthcare and social assistance, educational services, and retail trade. These sectors combined to account for 5,036 of the 8,985 jobs in the top 10 growth industries.

Garrett County

Industry Name	2017 Employment	OTY %
Merchant wholesalers, durable goods	187	12.7
Real estate	361	11.4
Motor vehicle and parts dealers	318	5.3
Mining, except oil and gas	103	4.0
Ambulatory health care services	455	3.9
Credit intermediation and related activities	127	3.3
Health and personal care stores	78	2.6
Transit and ground passenger transportation	81	1.2
Food services and drinking places	1,143	1.0
Building material and garden supply stores	298	0.3

In Garret County, retail trade was the most represented growth industry in the top 10 with three major subsectors: motor vehicle and parts dealers, health and personal care stores, and building material and garden supply stores. These subsectors employed a total of 694 workers. Employment in Garrett County's top 10 growth industries was concentrated in the accommodation and food services sector with 1,143 workers in the food services and drinking places subsector. Only one of the top 10 growth industries was goods producing.

Harford County

Industry Name	2017 Employment	OTY %
Truck transportation	825	39.4
Motion picture and sound recording industries	146	36.4
Support activities for transportation	99	26.9
Real estate	728	26.4
Plastics and rubber products manufacturing	336	15.9
Construction of buildings	1,252	15.4
Food manufacturing	959	15.4
Building material and garden supply stores	1,047	15.1
Administrative and support services	3,444	14.4
Electronics and appliance stores	247	10.8

Administrative support and waste services accounted for 37.9 percent of the employment in the top 10 growth industries for Harford County, with 3,444 employees in the administrative and support services subsector. The retail trade, transportation and warehousing, and manufacturing sectors all had two subsectors represented. Goods producing industries made up three of the top 10 growth industries.

Howard County

Industry Name	2017 Employment	OTY %
Chemical manufacturing	321	48.6
Miscellaneous manufacturing	612	46.8
Heavy and civil engineering construction	844	36.6
Couriers and messengers	376	21.7
Machinery manufacturing	552	21.6
Beverage and tobacco product manufacturing	432	17.7
Crop production	192	17.1
Non-store retailers	216	16.8
Motion picture and sound recording industries	128	13.3
Amusements, gambling, and recreation	2,823	11.1

45.5 percent of the employment in Howard County's top 10 growth industries was in goods producing subsectors. Manufacturing (four subsectors), construction (one subsector), and agriculture, forestry, fishing, and hunting (one subsector) make up six of the top 10 growth industries in Howard County. However, most of the employment lies in the service-providing subsector, led by the amusements, gambling, and recreation subsector of the arts, entertainment, and recreation sector with 2,823 employees. This single subsector alone accounts for 43.5 percent of employment in the top 10 growth sectors, almost matching the six combined goods producing subsectors.

Kent County

Industry Name	2017 Employment	OTY %
Specialty trade contractors	244	12.4
Repair and maintenance	85	10.4
Professional and technical services	262	8.7
Accommodation	98	7.7
Ambulatory health care services	344	6.5
Chemical manufacturing	310	6.5
Animal production and aquaculture	105	5.0
Administrative and support services	212	5.0
Nursing and residential care facilities	464	3.8
Crop production	146	3.5

Health care and social assistance accounted for 35.6 percent of the employment in the top 10 Kent County growth industries. 808 employees were split between two sectors: ambulatory health care services and nursing and residential care facilities. There were four goods producing sectors that employed a total of 805 workers.

Montgomery County

Industry Name	2017 Employment	OTY %
Other information services	935	48.2
Warehousing and storage	286	30.6
Museums, historical sites, zoos, and parks	166	22.1
Chemical manufacturing	4,469	18.9
Beverage and tobacco product manufacturing	257	16.8
Nonmetallic mineral product manufacturing	179	15.5
Transit and ground passenger transportation	1,402	15.4
Utilities	607	13.5
Clothing and clothing accessories stores	4,425	13.3
Miscellaneous manufacturing	370	12.1

Manufacturing drove growth in Montgomery County with four subsectors in the top 10 growth industries. These subsectors employed 40.3 percent of workers in the top 10 Montgomery County growth industries. The remaining six industries were service-providing. Retail trade's clothing and clothing accessories stores subsector employed 4,425 workers, 33.8 percent of the total employed in the top 10 growth industries.

Prince George's County

Industry Name	2017 Employment	OTY %
Accommodation	8,068	105.3
Electronic markets and agents and brokers	890	22.3
Fabricated metal product manufacturing	1,109	13.5
Food manufacturing	780	12.9
Clothing and clothing accessories stores	3,679	12.2
Motion picture and sound recording industries	443	10.2
Furniture and home furnishings stores	1,738	7.7
Merchant wholesalers, durable goods	5,602	7.3
Heavy and civil engineering construction	2,753	6.9
Machinery manufacturing	103	6.2

Manufacturing was also well represented in the Prince George's County top 10 growth industries list. However, these three subsectors employed only 7.9 percent of the employees in the top 10 growth industries. The accommodation subsector of the accommodation and food services sector employed nearly one-third (32.1 percent) of the employees in the top 10 growth industries. In total, there were four goods producing industries and six service-providing industries.

Queen Anne's County

Industry Name	2017 Employment	OTY %
Truck transportation	115	13.9
Gasoline stations	167	13.6
Repair and maintenance	220	10.0
Ambulatory health care services	682	9.5
Food manufacturing	144	9.1
Credit intermediation and related activities	196	6.5
Specialty trade contractors	708	5.5
Food services and drinking places	2,237	5.1
Fabricated metal product manufacturing	128	4.9
Amusement, gambling, and recreation	452	4.6

Accommodation and food services led the Queen Anne's County top 10 growth industries, with two subsectors accounting for 53.3 percent of employment the top 10 growth industries. The seven service-providing industries employed 80.6 percent of the workers employed by top 10 growth industries. Two manufacturing and one construction subsector made up the goods providing industries.

Saint Mary's County

Industry Name	2017 Employment	OTY %
Fabricated metal product manufacturing	126	32.6
Clothing and clothing accessories stores	178	30.9
Management of companies and enterprises	139	9.4
Real estate	264	6.9
Motor vehicle and parts dealers	613	6.6
Miscellaneous store retailers	206	5.6
Food services and drinking places	3,585	5.5
Construction of buildings	348	5.1
Health and personal care stores	250	5.0
Accommodation	247	4.7

Accommodation and food services, with two of the top 10 Saint Mary's County growth industries, employed 64.3 percent of all employees employed by top 10 growth industries. The two goods producing industries, one in the construction sector and one in the manufacturing sector, employed only 8.0 percent of the workers employed by top 10 growth industries.

Somerset County

Industry Name	2017 Employment	OTY %
Specialty trade contractors	240	26.3
Insurance carriers and related activities	89	14.1
Ambulatory health care services	330	13.0
Membership associations and organizations	97	11.5
Food services and drinking places	327	6.9
Food and beverage stores	166	1.8
Nursing and residential care facilities	450	0.7
Food manufacturing	118	-3.3
Merchant wholesalers, nondurable goods	454	-5.2
Professional and technical services	97	-6.7

Somerset County had seven sectors with positive over-the-year growth; the top 10 was filled in with the three sectors with the smallest over-the-year decline. Service-providing industries made up 84.9 percent of the employment in the top 10 Somerset County growth industries, with the largest employment in the merchant wholesalers, nondurable goods subsector of wholesale trade. In total, eight of the top 10 growth industries were service-providing and two were goods producing.

Talbot County

Industry Name	2017 Employment	OTY %
Management of companies and enterprises	231	32.0
Heavy and civil engineering construction	122	28.4
Accommodation	554	24.8
Repair and maintenance	287	12.5
Real estate	194	10.2
Ambulatory health care services	1,817	6.5
Nursing and residential care facilities	604	6.2
Administrative and support services	1,432	6.0
Construction of buildings	260	5.3
Motor vehicle and parts dealers	341	4.6

Ambulatory health care services and nursing and residential care facilities, both subsectors of the healthcare and social assistance sector, accounted for 41.4 percent of the employees in the top 10 Talbot County growth industries. There were six other service-providing industries in the top 10, for a total of eight. The two goods producing industries, both in the construction sector, employed 6.5 percent of the 5,842 workers in the top 10 growth industries.

Washington County

Industry Name	2017 Employment	OTY %
Food manufacturing	385	21.8
Broadcasting, except internet	147	11.4
Clothing and clothing accessories stores	1,426	8.5
Fabricated metal product manufacturing	640	7.9
Heavy and civil engineering construction	258	5.7
General merchandise stores	1,645	5.6
Management of companies and enterprises	573	5.3
Waste management and remediation services	200	5.3
Administrative and support services	3,441	5.2
Health and personal care stores	535	4.9

39.4 percent of employees working in the top 10 Washington County growth industries are in the administrative support and waste services sector. Three retail subsectors account for another 39.0 percent of total people employed. The three goods producing industries represent construction (one subsector) and manufacturing (two subsectors), which employed only 13.9 percent of the workers in the top 10 Washington County growth industries.

Wicomico County

Industry Name	2017 Employment	OTY %
Machinery manufacturing	113	18.9
Fabricated metal product manufacturing	144	12.5
Real estate	453	10.2
Waste management and remediation services	239	9.6
Furniture and home furnishings stores	185	8.8
Chemical manufacturing	547	6.2
Clothing and clothing accessories stores	616	6.2
Crop production	228	6.0
Paper manufacturing	92	5.7
Repair and maintenance	491	5.1

With four subsectors in the top 10, manufacturing was the most represented sector in the Wicomico County top 10 growth industries. However, the five goods producing industries made up only 36.2 percent of employment in the top 10 growth industries. The five service-providing industries were led by two retail subsectors, which accounted for 25.8 percent of employment in the top 10 Wicomico growth industries.

Worcester County

Industry Name	2017 Employment	OTY %
Sports, hobby, music instrument, book stores	211	38.8
Miscellaneous store retailers	239	16.0
Professional and technical services	823	15.6
Health and personal care stores	253	14.5
Membership associations and organizations	198	10.0
Non-store retailers	101	9.8
Administrative and support services	582	9.6
Food and beverage stores	726	8.5
Merchant wholesalers, durable goods	133	8.1
Gasoline stations	127	7.6

Retail trade subsectors, seven in total, employed 52.8 percent of workers in the Worcester County top 10 growth industries. All 10 of the top 10 industries were in the service-providing sphere. The largest individual subsector was professional and technical services with 24.3 percent of the top 10 total employment.

Maryland Occupations

Because of Maryland's diverse economy, there are opportunities across occupational sectors for workers at every education level. Certain occupations offer relatively greater opportunity for workers at each educational attainment level. For this document, promising occupations are defined as occupations that are projected to grow over the next eight years and have a median wage above the state median wage of \$43,833.

For each educational attainment level, there are a number of promising occupations that will allow workers the opportunity to pursue employment in a field of their interest, earn higher than average wages, and have confidence for future job opportunities. Select occupations for each educational level are highlighted below. While opportunities exist at each level of educational attainment, higher educational attainment levels have greater numbers of promising occupations, and generally higher wages. For a comprehensive list of promising occupations, please see Appendix C.

High School Diploma

Eighty-two occupations offer relatively greater opportunity for workers with a high school diploma. These occupations represent a wide array of sectors, with the office and administrative support, construction and extraction, and installation, maintenance, and repair sectors most represented. The average median salaries for these occupations is \$57,514. These occupations typically require work experience and high investments in on-the-job training, including apprenticeships.

First-line supervisors of office and administrative support workers have the most projected total job openings (openings from economic expansion, “growth,” in addition to openings created by movement in the labor market, “separations”²). Through 2026, there are projected to be 38,441 total openings in this occupation. Of these openings, 2,473 are projected to come in the form of growth – also the most in the high school diploma category. The 2017 median yearly wage for this occupation was \$58,952. These workers directly supervise and coordinate the activities of clerical and administrative support workers.

Commercial pilots had the highest 2017 median salary at \$101,439. Through 2026, the projected total openings for commercial pilots was 477, only 59 of which are projected to come from economic growth. Despite the seemingly low number of growth openings, commercial pilots led the



Figure 1 Commercial pilots earned a median salary of \$101,439.

² Total openings includes openings from growth and openings created by “separations,” i.e., workers leaving a job that will need to be replaced by other workers. For more information on separations and projections in general, please visit: <http://dllr.maryland.gov/lmi/iandoproj/aboutnum2.shtml>.

high school diploma category with a projected growth rate of 13.9 percent. These workers pilot and navigate the flight of fixed-winged aircraft on nonscheduled air carrier routes, or helicopters. While this occupation does not require a college diploma, pilots are required to have a commercial pilot certificate.

Locksmiths and safe repairers had the second highest growth rate in the high school diploma category, with a 2016 – 2026 projected growth rate of 13.61 percent. This growth rate equates to a projected growth of 83 positions. With separations added, the total openings through 2026 are projected to be 676. Workers in this occupation earned a 2017 median salary of \$43,859. Locksmiths and safe repairers repair and open locks, make keys, change locks and safe combinations, and install and repair safes.

Sales representatives, services, all other is projected to add 2,110 new positions due to economic growth, the second most for promising occupations for high school diplomas. The 6.9 percent growth, when paired with separations, adds up to a total projected openings count of 34,664. Workers in this occupation earned a 2017 median salary of \$60,358. Sales representatives, services, all other sell services including, but not limited, to business services, membership solicitation, and pest control service sales.

Associate's Degree or Non-degree Award

There are 48 promising occupations for those with an associate's degree or non-degree award. With the additional educational attainment level, the average median salary of \$64,294 is \$6,780 higher than the average median salary for promising occupations for those with high school diplomas. Many sectors are also represented at this educational attainment level, with architecture and engineering, healthcare practitioners and technicians, and installation, maintenance, and repair sectors being the most represented. These occupations allow workers to substitute the additional educational attainment for job experience and/or on-the-job training when compared with jobs available to those with a high school diploma.

Heavy and tractor-trailer truck drivers, a job requiring a postsecondary non-degree award, is projected to have the most total openings through 2026, with 26,390. Of these openings, 1,363 are projected to come from economic growth, a rate of 5.9 percent. Workers in this occupation earned a median salary of \$45,585 in 2017. Heavy and tractor-trailer truck drivers drive a tractor-trailer combination or a truck with a capacity of at least 26,000 pounds gross vehicle weight.

Funeral service managers, an occupation requiring an associate's degree, paid the highest in the category, with a median salary of \$93,768. There are 65 projected openings due to economic growth, a rate of 10.6 percent. With separations, total openings are projected at 512. Funeral service managers plan, direct, or coordinate the services or resources of funeral homes. This occupation does not include morticians, undertakers, and funeral directors.

Dental hygienists, an occupation requiring an associate's degree, is projected to grow at the fastest rate, with a projected 30.5 percent growth rate through 2026. This equates to 1,094 new jobs projected through 2026. With separations added, the total openings are projected to be 3,513. The median salary for dental hygienists in 2017 was \$89,568. These workers clean teeth and examine oral area, head, and neck for signs of oral disease.



Figure 2 Dental hygienists are projected to add 1,094 new positions through 2026.

Licensed practical and licensed vocational nurses, an occupation requiring a postsecondary non-degree award, is projected to have the most openings due to economic growth with 1,847 openings, a growth rate of 15.4 percent. In total, with separations added, there are projected to be 10,909 positions available through 2026. Licensed practical and licensed vocational nurses earned a median salary of \$53,229 in 2017. Licensed practical and licensed vocational nurses care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions.

Bachelor's Degree

There are 132 promising occupations at the bachelor's degree level. These occupations offered an average median salary of \$84,337, which is 1.3 times the average median salary for those working in promising occupations requiring an associate's or postsecondary non-degree award. Fewer sectors are represented in the bachelor's degree category, with most of the occupations in the management, business and financial operations, and architecture and engineering sectors.

Registered nurses are projected to have the most openings as the result of economic growth with 5,926 through 2026, a growth rate of 11.5 percent. When combined with openings created by separations, there are projected to be 33,499 total openings through 2026. Registered nurses earned a 2017 median salary of \$74,117. These workers assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records.

Radio and television announcers are projected to have the fastest growth rate through 2026 with a projected growth of 17.1 percent. The 65 new jobs from economic growth, when added to separations, totals 458 openings through 2026. In 2017, these workers made a median wage of \$44,931. Radio and television announcers speak or read from scripted materials, such as news reports or commercial messages, on radio or television.

General and operations managers are projected to have the most total openings through 2026 with 43,380. Of these total openings, 3,330 are projected as a result of economic expansion, a growth rate of 6.9 percent. General and operations managers

were paid a median salary of \$119,428. Workers in this occupation plan, direct, or coordinate the operations of public or private sector organizations.

Chief executives were the highest paid in the bachelor's degree category with a median annual salary of \$199,747. Through 2026, there are 233 projected growth openings (a 10.1 percent growth rate). Combined with separations, the total openings through 2026 are projected to be 1,933. Chief executives determine and formulate policies and provide overall direction of companies or private and public sector organizations within guidelines set up by a board of directors or similar governing body.

Advanced Degrees

There are 51 promising occupations spread across seven sectors for those with advanced degrees. While workers in this category lose some variety of occupational fields, the tradeoff is an average median salary of \$105,295. The most represented sectors are healthcare practitioners and technical occupations, education, training, and library occupations, and life, physical, and social sciences occupations.

Psychiatrists were the highest paid in this category with a 2017 median annual salary of \$195,856. By 2026, there are expected to be 346 total openings for psychiatrists, 155 of which are projected to come from economic growth (a rate of 23.3 percent). This occupation requires a doctoral or professional degree. Psychiatrists diagnose, treat, and help prevent disorders of the mind.

Lawyers, an occupation requiring a doctoral or professional degree, are projected to have the highest level of total openings through 2026, with 6,522. With a projected economic growth rate of 2.8 percent, 413 of the total openings are expected to come from economic expansion. In 2017, lawyers earned a median annual salary of \$105,450. Lawyers represent clients in criminal and civil litigation and other legal proceedings, draw up legal documents, or manage or advise clients on legal transactions.

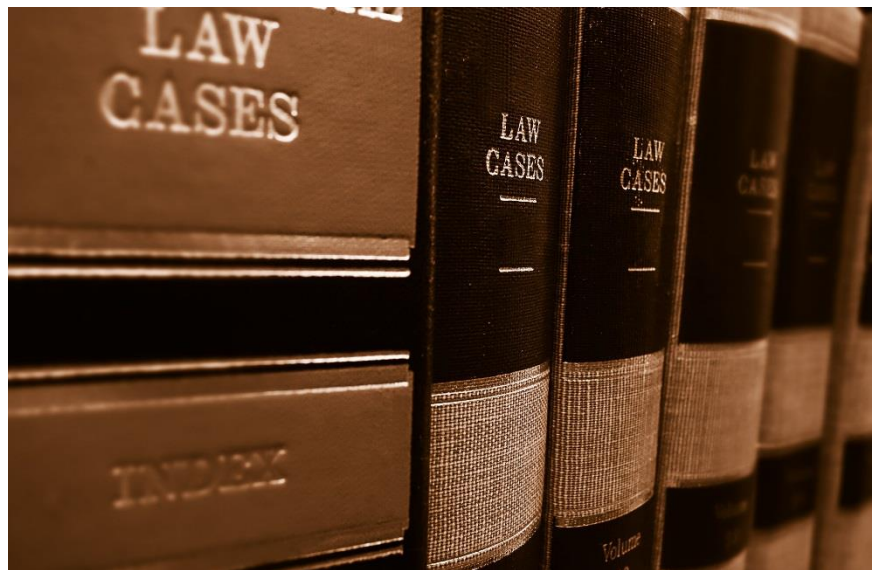


Figure 3 Lawyers are projected to have 6,522 openings through 2026.

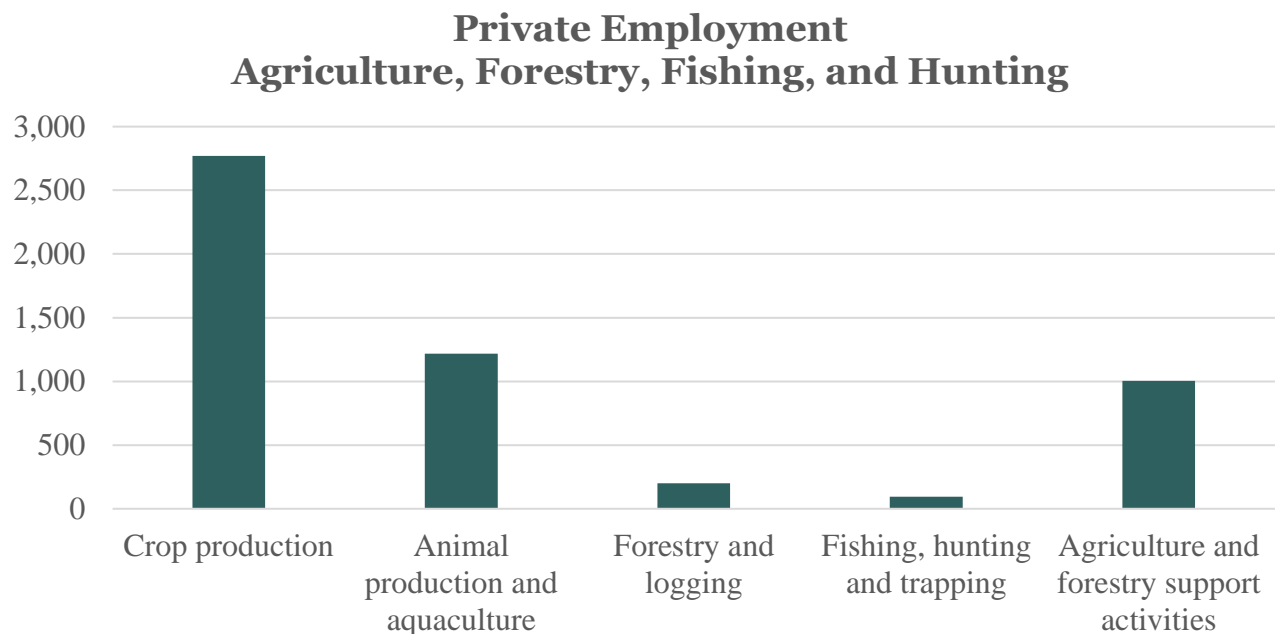
Chiropractors, with a projected 31.9 percent growth rate through 2026, is the occupation expected to grow the fastest. The 234 new positions, when combined with separations, adds up to a projected 443 total openings through 2026. Workers in this occupation, requiring a doctoral or professional degree, earned a 2017 median annual salary of \$66,519. Chiropractors assess, treat, and care for patients by manipulation of spine and musculoskeletal system.

Physical therapists, an occupation requiring a doctoral or professional degree, are projected to add 1,280 new positions due to economic growth through 2026, a 25.3 percent growth rate. With separations, the total openings through 2026 are projected to be 3,566. Physical therapists earned an annual median salary of \$89,011 in 2017. Workers in this occupation assess, plan, organize, and participate in rehabilitative programs that improve mobility, relieve pain, increase strength, and improve or correct disabling conditions resulting from disease or injury.

Maryland's Industry Sectors

Agriculture, Forestry, Fishing, and Hunting

Agriculture, forestry, fishing, and hunting made up about 0.24 percent of private employment in Maryland in the year 2017 with 5,285 workers at 625 business locations throughout the state. Over the year, this sector gained 31 employees, a growth rate of 0.6 percent. These workers made an average weekly wage of \$703. Average weekly wages in this sector rose \$30 from 2016 to 2017, a growth rate of 4.5 percent.



52.4 percent of workers in agriculture, forestry, fishing, and hunting work in the crop production subsector (2,770 workers). Workers in the forestry and logging subsector were likely to have higher wages, as the average weekly wage in this subsector is the highest at \$762. Three of the five subsectors grew year over year, led by animal production and aquaculture with 48 more employees in 2017 compared to 2016, a 4.1 percent growth rate. Fishing, hunting, and trapping grew at a faster rate (6.7 percent), though the smaller subsector only added six employees.

Across Maryland's Counties

Agriculture, forestry, and fishing had the most employees in Cecil County, where 926 workers were employed. In Cecil County, workers made an average weekly wage of \$646, which ranked sixth in the state. Over the year, Cecil County added 24 employees (the most in the state), and grew at a rate of 2.7 percent (ranked fifth in the state).

In Kent County, agriculture, forestry, fishing, and hunting workers made the most with an average weekly wage of \$820. With 284 employees, Kent County ranked fourth in the

state. Over-the-year growth in Kent County ranked fourth in percentage growth rate with 3.1 percent, and third in overall numeric change with eight workers added.

Allegany County ranked first in over-the-year percentage growth with a growth rate of 25.0 percent. However, Allegany ranked seventh in the state with a numeric over-the-year growth of only one employee. Workers in Allegany County made an average weekly wage of \$433, which was ranked ninth in the state (the last of counties with available employment data). Allegany County also ranked last (ninth) in the number of employees with a total of five.

Demographics

Agriculture, forestry, fishing, and hunting has a very small pool of young workers to backfill positions that will soon be vacated by the retirements of older workers. While there are nearly double the number of workers nearing retirement age than those under 25, the majority of workers in this sector are of prime working age.

Workers in agriculture, forestry, fishing and hunting typically have something between a high school diploma and associate's degree, with 51.5 percent of workers having a high school diploma, some college, or an associate's degree.

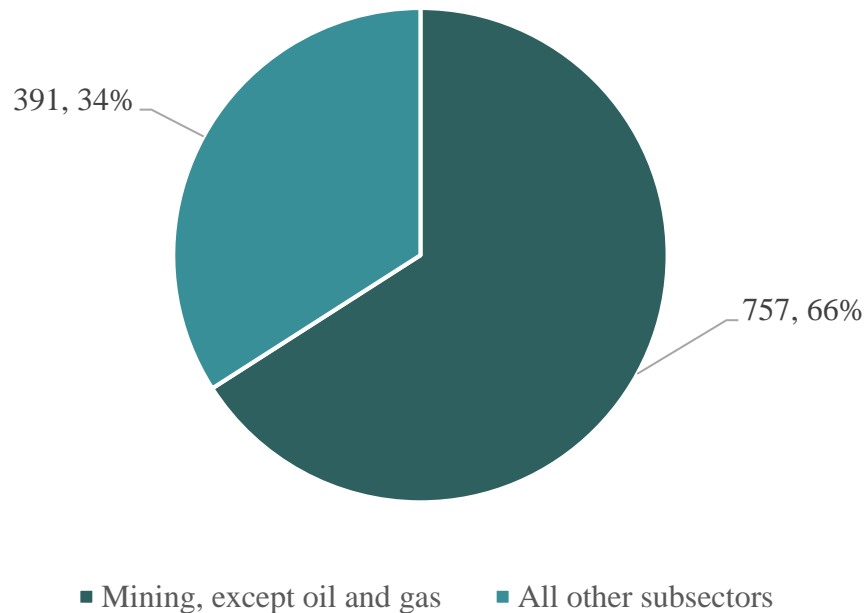
This sector was 63.1 percent male.

Mining, Quarrying, and Oil and Gas Extraction

Mining, quarrying, and oil and gas extraction represents Maryland's smallest sector, with 2017 employees totaling 1,148 at 98 business locations. These workers made an average weekly wage of \$1,339. From 2016 to 2017, mining, quarrying, and oil and gas extraction saw a decrease of 22 employees (-1.9 percent).

66 percent of workers in the mining, quarrying, and oil and gas extraction sector work in the mining, except oil and gas subsector (757 workers). Workers in this subsector earned an average weekly wage of \$1,367. In 2017, there were 93 more workers in this subsector than in 2016, a growth rate of 14 percent.

Private Employment Distribution Mining, Quarrying, and Oil and Gas Extraction



Across Maryland's Counties

Garrett County had the most employees with 274. These employees earned an average weekly wage of \$1,314, which ranked fifth in the state. Garrett County lost 21 mining and extraction jobs from 2016 to 2017, ranking seventh out of the seven counties with available employment data. It was the only county with a negative growth rate, so it also ranked seventh, with -7.1 percent over-the-year growth.

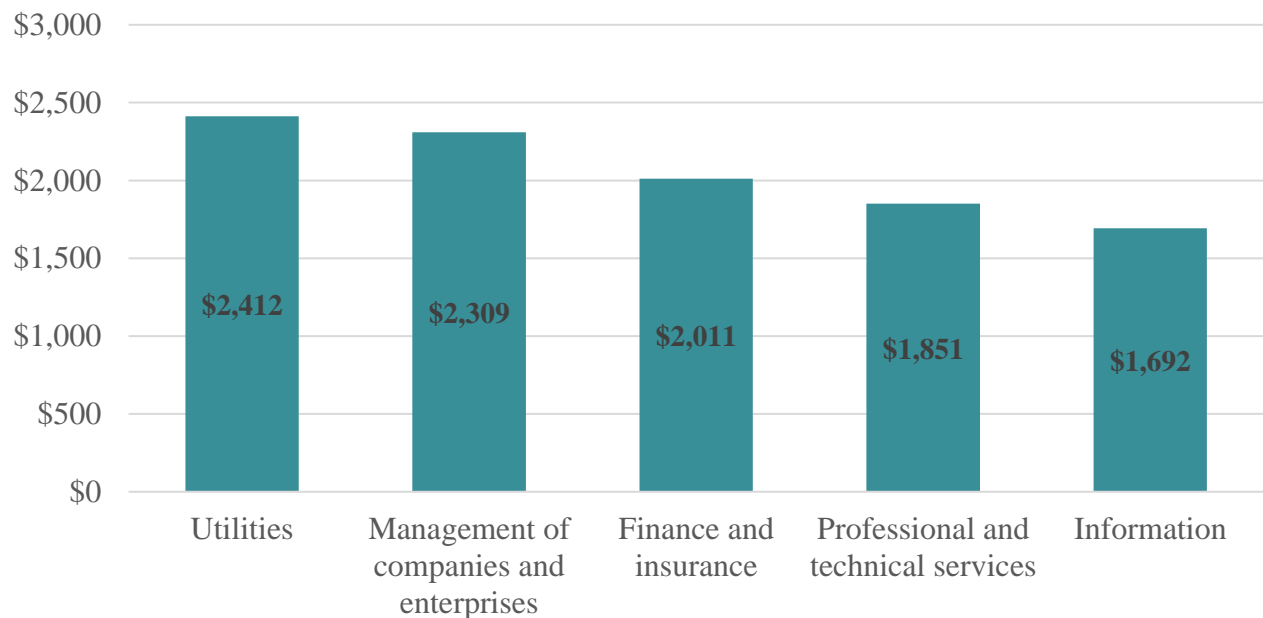
Baltimore County ranked first in both over-the-year employment measurements, with a gain of 44 employees for a rate of 57.1 percent. However, mining workers in Baltimore County had the smallest average weekly wage, \$1,240, and ranked seventh. The 121 mining employees in the county ranked second in the state.

Anne Arundel County mining employees earned the highest average weekly wage at \$1,579. The employment count of 80 employees ranked fifth in the state. Anne Arundel County ranked second with a gain of eight employees from 2016 to 2017 for a growth rate of 11.1 percent (also ranked second).

Utilities

The utilities sector employed 9,762 workers in 2017, 79 fewer than in 2016 (a decrease of 0.8 percent). These workers earned an average weekly wage of \$2,412, the highest average weekly wage of all of Maryland's private employment sectors.

**Maryland Top Five Sectors
Private Average Weekly Wage
(2017)**



The utilities sector is made up of one subsector, also named utilities.

Across Maryland's Counties

Baltimore City ranked first in utilities employment with 3,056 workers. These workers also made the highest wages in the state with an average weekly wage of \$3,037. The 2016 to 2017 gain of 47 employees ranked second in the state. However, since there was already a large base employment, the over-the-year percentage growth rate was only 1.6 percent, tied for seventh out of the 12 counties with available employment data.

Montgomery County added the most employees year over year with a gain of 72 employees. Again, the base employment was high, ranked the fifth largest in the state with 607 employees, leading to a lower over-the-year percentage growth rate of 13.5 percent (ranked third). Utilities employees in Montgomery County earned the second highest wages in the state with an average weekly wage of \$2,813.

With a burgeoning utilities sector, Talbot County led the way with an over-the-year percentage growth of 35.7 percent. In numeric terms, this growth was five employees

(ranked sixth in the state). The 19 employees (ranked 12th of 12) earned an average weekly wage of \$1,670, which ranked ninth in the state.

Demographics

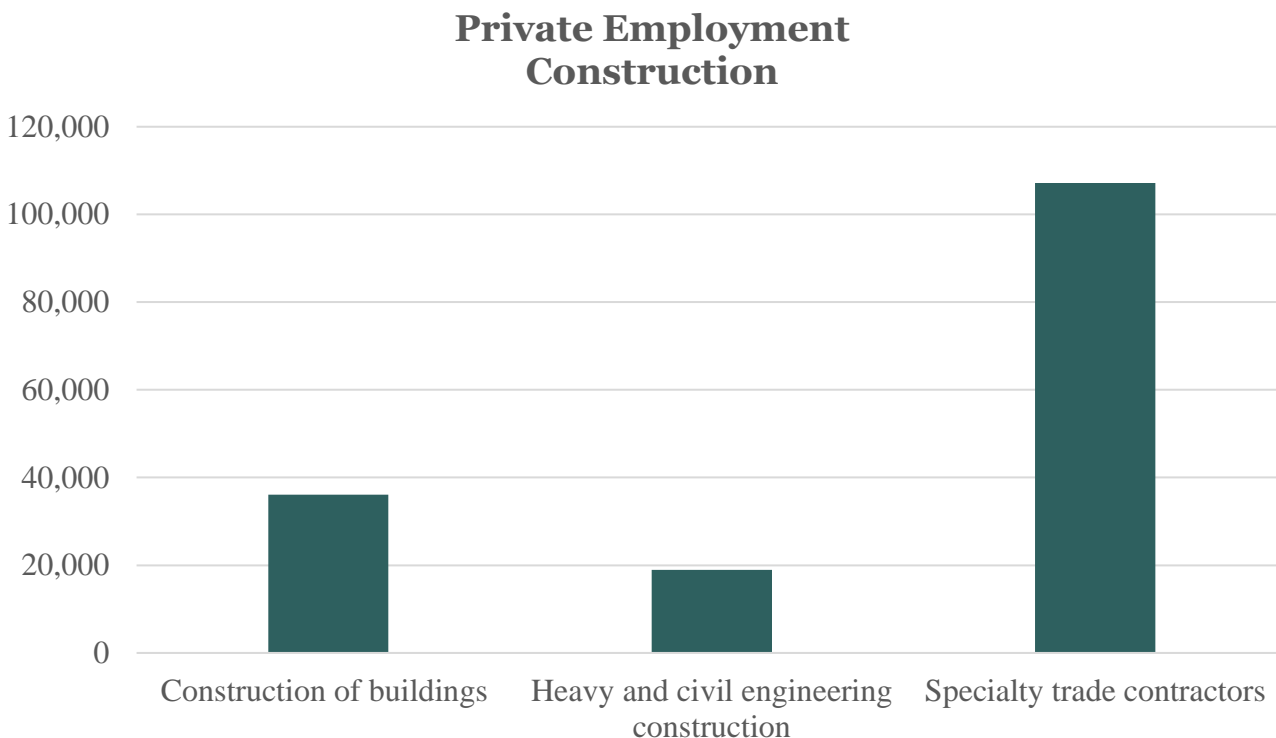
The workforce in the utilities sector is almost evenly stratified into three educational attainment groups: those with high school diplomas, those with some college or associate's degrees, and those with at least a bachelor's degree. Workers in this sector almost all have at least a high school diploma and only 10.1 percent of workers have either less than a high school diploma or unavailable educational attainment information.

With the educational requirements of at least high school, the utilities sector would be expected to have workers under the prime working age. However, this is not the case as only 2.7 percent of the utilities workforce is under 25. Nearly 30 percent of the workforce (28.3 percent) is over the prime working age. Unless there is a pipeline of potential utilities workers working to attain the required education for this sector, there will be a shortage of workers moving forward.

78.1 percent of workers in the utilities sector are males.

Construction

In 2017, the construction sector employed 162,116 employees statewide. These employees made an average weekly wage of \$1,251. The workforce in Maryland is more heavily concentrated in construction employment than the national workforce. From 2016 to 2017, the construction sector grew by 0.7 percent, adding 1,102 workers.



Construction is made up of three subsectors: construction of buildings, heavy and civil engineering construction, and specialty trade contractors. The largest subsector, specialty trade contractors, also drove growth in the construction sector accounting for 1,568 additional employees from 2016 to 2017, making up for employment losses in construction of buildings. The largest subsector, specialty trade contractors, was also the lowest paid with an average weekly wage of \$1,184 compared to construction of buildings at \$1,376 and heavy and civil engineering construction at \$1,396.

Across Maryland's Counties

Prince George's County employed the most construction workers with 26,644 workers in 2017. Prince George's County also added the most employees from 2016 to 2017 with 550, with a 2.1 percent over-the-year growth rate that ranked eighth out of 23 counties with available employment data. The average weekly wage of \$1,319 ranked third in the state.

Construction employees in Howard County made the highest wage with an average of \$1,373 per week. There were 11,668 workers in 2017, ranked fifth in the state. The 216 employees added over the year ranked fourth, and its 1.9 percent over-the-year growth rate ranked ninth in the state.

Somerset County construction employment grew by 20.8 percent from 2016 to 2017, making it the fastest growing county in construction employment. The 58 employees added over the year ranked 10th in the state. However, Somerset ranked last (23rd) in employment level, 337 employees, as well as for average weekly wage at \$697.

Demographics

Workers in construction are more likely to have not completed high school rather than have a bachelor's or advanced degree. 48.1 percent of workers in construction have a high school diploma or less, indicative that workers with less formal education are finding opportunities in the construction sector. The construction sector is also overwhelmingly male with 81.5 percent of workers being male. The largest age group in the construction sector is 45-54 years old, with 23.9 percent of workers in this age range. However, the two groups representing workers up to 20 years young (25-34 and 35-44) account for 43.4 percent of workers in construction, indicating there is a young workforce available to replace workers aging out of the workforce in the construction sector.

Manufacturing

Manufacturing ranked third in over-the-year job growth, adding 3,250 jobs from 2016 to 2017 (a rate of 3.1 percent). The 106,836 workers in this sector earned an average weekly wage of \$1,487 in 2017.

Computer and electronic product manufacturing was the largest subsector with 18,973 employees working at 414 business locations. These workers earned an average weekly wage of \$2,356. From 2016 to 2017, this subsector grew at a rate of 8.0 percent, adding 1,402 workers.

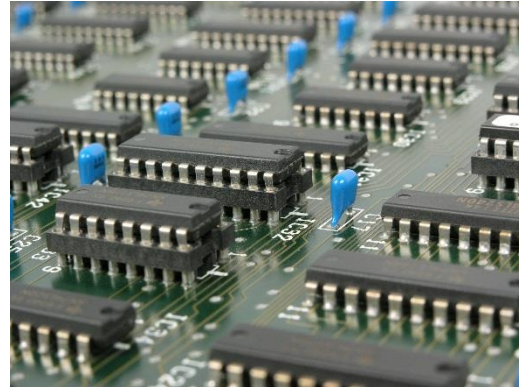


Figure 4 Computer and electronic product manufacturing employed 18,973 workers in 2017.

Food manufacturing had the most business locations in 2017, with 4,424 establishments. These establishments employed 15,601 workers, 412 more than in 2016, a 2.7 percent growth rate. The workers in food manufacturing earned an average weekly wage of \$961.

Chemical manufacturing not only paid the most in 2017, with a \$2,318 average weekly wage, but also grew at the fastest rate from 2016 to 2017 (10.6 percent). The 1,224 additional employees brought the employment count to 12,752 in 2017. These workers were employed at 276 business locations.

Miscellaneous manufacturing added 421 workers from 2016 to 2017, a growth rate of 9.6 percent. 396 business locations employed 4,788 workers making an average weekly wage of \$1,197 in 2017.

Across Maryland's Counties

Baltimore County manufacturers had the most employees in the state with 15,107 workers. From 2016 to 2017, these employers also added the most employees, 1,420. The over-the-year growth rate of 10.4 percent ranked third in the state. Baltimore County manufacturing employees earned the fifth most in the state with an average weekly wage of \$1,394.

Manufacturing employees in Montgomery County earned the highest average wage with \$2,436 per week. Manufacturers in Montgomery County had the second highest employment count in the state with 12,641 workers. Over the year, 703 new workers joined the workforce, the second most in the state. From 2016 to 2017, Montgomery County manufacturing employment grew at a rate of 5.9 percent, sixth in the state.

Manufacturing employment in Somerset County grew by 19.0 percent, the fastest in the state. The 40 new employees (ranked 11th) brought manufacturing employment up to 250 workers (ranked 23rd out of 23). These workers earned an average weekly wage of \$1,051, ranked 13th.

Demographics

Manufacturing was 69.5 percent male through the first three quarters of 2017. 53.3 percent of workers in manufacturing have at least some college education. However, there are still opportunities for those without a college education (40.5 percent of workers had a high school diploma or less).

30.1 percent of manufacturing workers are above the prime working age of 25-54. Workers above 45 years old account for 55.5 percent of the manufacturing workforce.

Wholesale Trade

Wholesale trade employed 86,318 workers at 10,378 business locations in 2017. From 2016 to 2017, 459 additional workers came into wholesale trade, a growth rate of 0.5 percent. The workers in wholesale trade made an average weekly wage of \$1,512. Wholesale trade is divided into three subsectors: merchant wholesalers, durable goods; merchant wholesalers, nondurable goods; and electronic markets and agents, and brokers.

Merchant wholesalers, durable goods was the fastest growing and largest of the subsectors. The 42,773 employees in 2017 were 431 more than in 2016, a growth rate of 1.0 percent. These workers made an average weekly wage of \$1,572 at 4,022 business locations.

Merchant wholesalers, nondurable goods was the second largest subsector, employing 28,519 in 2017. From 2016 to 2017, the subsector grew at a rate of 0.4 percent, adding 119 employees. Workers in this subsector earned an average weekly wage of \$1,235. There were 1,804 business locations in 2017.

Across Maryland's Counties

Howard County wholesalers ranked first with 12,998 employees in 2017. These employees earned the third best wages in the state with an average weekly wage of \$1,611. From 2016 to 2017, 186 workers entered the wholesale trade workforce, the second most in the state. The 1.5 percent year over year growth rate ranked eighth in the state.

Wholesale trade workers in Montgomery County earned the highest wages with an average of \$2,062 per week. The 7,038 workers was the fifth most in the state. One of eight counties to experience an over-the-year decline, Montgomery County lost 21 wholesale trade employees, ranking 14th out of 19 counties with available employment data. The over-the-year decline of 0.3 percent ranked 12th out of 19 counties.

Prince George's County wholesalers added 578 employees from 2016 to 2017, the best year over year growth in the state. The percentage growth rate, 6.0 percent, ranked fourth in the state. The 10,193 employees (fourth) made an average weekly wage of \$1,216 (ninth).

Calvert County wholesale trade employment grew at a rate of 10.3 percent, the best in the state. The 49 additional employees from 2016 to 2017 ranked seventh. Employees in Calvert County earned the second highest average weekly wage at \$1,654. There was a 14th ranked employment level of 526 workers in 2017.

Demographics

Workers in wholesale trade are distributed across all educational attainment levels. Most workers have at least a high school diploma or equivalent.

Workers in wholesale trade are most likely to be in prime working age with 66.9 percent of workers between 25 and 54 years. However, the age distribution in this sector tends to be older with 52.2 percent of all workers being 45 or older.

Wholesale trade is 70.6 percent male.

Retail Trade

Retail trade was the second largest sector by employment in 2017, with 288,011 workers employed at 18,531 business locations. Retail trade lost 2,041 jobs from 2016 to 2017, a decline of 0.7 percent. Workers in retail trade earned an average weekly wage of \$599, the second lowest of all sectors.



Figure 5 Maryland had a higher concentration of food and beverage stores than the U.S. as a whole.

Food and beverage stores accounted for the most retail employment in 2017, with 67,722 employees. These workers made an average weekly wage of \$514. Over the year, the subsector declined by 0.8 percent, or 520 jobs. The large number of employees, in addition to the large number of establishments (3,798), supports the fact that the Maryland economy specialized in food and beverage stores in 2017. The Maryland economy had a 1.19 times greater employment concentration in this subsector than the United States' economy.

Non-store retailers paid the highest retail wages with an average weekly wage of \$1,064 in 2017. 5,278 workers at 746 business locations were employed in 2017, 577 fewer than in 2016, a decline of 9.9 percent.

Although retail as whole declined over the year, four of the 12 subsectors had an over-the-year growth, led by clothing and clothing accessories stores where the 1,538 new employees compared to 2016 represented a 6.0 percent growth rate. The other growing subsectors were motor vehicle and parts dealers (216 jobs for 0.6 percent growth), furniture and home furnishings stores (272 for 2.7 percent), and health and personal care stores (496 for 2.6 percent).

Across Maryland's Counties

Baltimore County retailers employed the most workers with a 2017 employment level of 46,220. These workers were the sixth best paid in the state with an average weekly wage of \$592. From 2016 to 2017, Baltimore County lost 1,098 retail jobs, ranking it 24th out of 24 counties. The over-the-year percentage decline of 2.3 percent was ranked 20th.

Worcester County retail trade sector employment grew by 5.6 percent from 2016 to 2017, making it the fastest growing retail sector in the state. The 207-employee gain ranked third in the state. Worcester County's 3,874 retail employees ranked 14th in the state. They earned a 22nd ranked average weekly wage of \$474.

The highest paid retail workers worked in Howard County, where they earned an average weekly wage of \$669. After a 2.0 percent decline in employment from 2016 to 2017 (ranked 18th), there were 17,076 retail employees in Howard County, the fifth

largest retail workforce in the state. The over-the-year loss of 351 employees ranked 20th in the state.

Frederick County retailers added the most workers from 2016 to 2017, with a gain of 301 employees. This gain of 2.3 percent ranked fourth in the state. In 2017, the Frederick County retail workforce was 13,197 employees, the seventh largest in the state. These workers earned the fourth highest average wage at \$612 per week.

Demographics

Retail workers are almost evenly split between male and female (51.1 percent male). Retail workers are evenly distributed across age ranges, with about 50 percent of at the prime worker's age (55.4 percent). Workers under 25 account for 23.3 percent and workers 55 and above accounted for 21.4 percent. Retail workers represented all educational attainment levels, though many retail workers were below prime working age and did not have educational attainment values, indicating looser educational requirements than in other industries.

Transportation and Warehousing

Transportation and warehousing was the second fastest growing sector in 2017, with a 3.9 percent over-the-year growth rate. The 78,069 employees in 2017 are 2,952 more than in 2016. These workers were employed at 3,928 business locations, and made an average weekly wage of \$980.

Warehousing and storage was the largest subsector in transportation and warehousing. 18,425 workers in 2017 worked at 254 business locations and made an average weekly wage of \$929. The over-the-year growth of 1,382 was also the largest in the sector. The 2016 to 2017 growth rate was 8.1 percent.



Figure 6 Air transportation grew by 9.8 percent from 2016 to 2017.

The fastest growing and highest paid subsector was air transportation. From 2016 to 2017, air transportation grew at a rate of 9.8 percent, adding 54 jobs. These workers made a sector-high average weekly wage of \$1,831. In 2017, 58 business locations employed 5,770 workers.

1,731 establishments made truck transportation the subsector with the most business locations. After a small decline of 0.6 percent (96 employees), the subsector employed 15,948 workers. These workers made an average weekly wage of \$974.

Across Maryland's Counties

Baltimore City had the largest transportation and warehousing sector in 2017 with an employment level of 15,316 workers. From 2016 to 2017, there was a growth of 381 employees (ranked fourth) for an over-the-year growth rate of 2.6 percent (ranked seventh out of 15 counties with available employment data). The workers in Baltimore City transportation and warehousing earned an average weekly wage of \$1,096, the third highest in the state.

The highest wages were in Saint Mary's County, where transportation and warehousing workers earned an average of \$1,409 per week. The 1,734 employees was the ninth largest out of 15. From 2016 to 2017, the Saint Mary's transportation and warehousing sector contracted at a rate of 0.6 percent, ranking it 12th. Numerically, this loss of 11 employees over the year was ranked 13th.

The transportation and warehousing sector added the most workers in Anne Arundel County. Here, 1,254 additional workers from 2016 to 2017 equated to a 10.2 percent growth rate, the second fastest in the state. Anne Arundel County had the second largest transportation and warehousing workforce in the state (13,495 workers), and had the second highest average weekly wage (\$1,206).

Cecil County was home to the fastest growth rate in transportation and warehousing, with a 27.2 percent increase from 2016 to 2017. The 555 additional employees ranked second in the state and added to the eighth largest transportation and warehousing sector, which employed a 2017 total of 2,593 workers. These workers earned an average weekly wage of \$857, the ninth most in the state.

Demographics

The plurality of workers in transportation and warehousing had a high school diploma or equivalent. Only 25.1 percent of employees in transportation and warehousing had less than a high school diploma or no available education data.

69.9 percent of workers in transportation and warehousing were male. 65.6 percent of the workers were of prime working age. 24 percent were older than the prime working age, and only 10.4 percent were below, indicating an aging workforce moving forward.

Information

The information sector employed 37,585 workers in 2017 after an over-the-year decline of 1.5 percent (572 employees). These workers made an average weekly wage of \$1,692 and worked at 2,712 business locations.

Other information services was one of two growth subsectors in the information sector. From 2016 to 2017, 299 additional workers represent a 15.4 percent growth rate. 2,243 workers in other information services worked at 285 establishments and made an average weekly wage of \$1,748.

The 9,547 workers in publishing industries except internet made the highest average weekly wage at \$1,841. Despite the high wages, this subsector experienced a decline of 2.4 percent, losing 237 workers from 2016 to 2017. In 2017, there were 839 establishments making up this subsector.

Telecommunications was the subsector with the highest 2017 employment. After a 2.7 percent decline (391 jobs), there were 13,853 employees in 2017. These workers were employed at 620 establishments and made an average weekly wage of \$1,698.

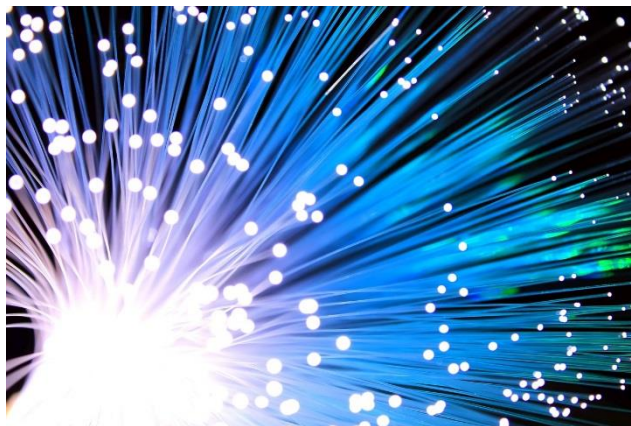


Figure 7 Telecommunications was the largest information subsector in 2017.

Across Maryland's Counties

Out of 23 counties with available employment data, Montgomery County had the largest information sector, employing 11,086 workers. These workers earned the second highest wages in the state with an average weekly wage of \$2,040. Over the year, there was a 6.1 percent decline in the Montgomery County information sector, which ranked 15th. The loss of 715 workers was the lowest ranked (23rd) over-the-year change in the state.

With 152 employees joining the information sector, Howard County was ranked first. This led to a third best over-the-year growth rate of 4.1 percent. The 3,881 workers (ranked fourth) earned the third highest wages in the state at \$1,947.

The workers in the Queen Anne's County information sector earned the most with an average weekly wage of \$2,268. With just 13 employees, the Queen Anne's County information sector was the smallest in the state (out of counties with available employment data). The information sector stayed level from 2016 to 2017, which was good enough to rank seventh in growth and growth rate.

With a growth rate of 18.6 percent, the Dorchester County information workforce grew at the fastest rate. Adding 22 employees from 2016 to 2017, it had the fourth highest employment gain in the information sector. Dorchester had one of the smallest information sector workforces (ranked 18th) with 140 employees. These workers also earned the lowest average weekly wage at \$506.

Demographics

Information was 60.4 percent male. The workers in this sector were mostly in the prime working age (72 percent) with almost equal distribution of workers across the three prime working age groups (25 – 34, 35 – 44, and 45 – 54).

37.7 percent of workers in information have at least a bachelor's degree. Less than 10 percent (8.4 percent) of workers have less than a high school diploma or equivalent, indicating educational attainment is one of the more important conditions of employment in this sector.

Finance and Insurance

Finance and insurance was the third highest paying sector in 2017. Workers in this sector earned an average weekly wage of \$2,011. There were 92,967 employees in finance and insurance after a loss of 1,911 (2.0 percent) from 2016 to 2017. There were 8,348 business locations in finance and insurance.

Credit intermediation and related activities was the only subsector in finance and insurance that had an over-the-year growth from 2016 to 2017, gaining 599 employees (1.4 percent). The 42,956 employees earned an average weekly wage of \$1,538. This subsector was made up of 3,287 business locations in 2017, making it the finance and insurance subsector with the most establishments.



Figure 8 Securities, commodity contracts, and investments paid an average weekly wage of \$3,901.

The highest paying subsector in Maryland was securities, commodity contracts, and investments. Workers in this subsector earned an average weekly wage \$3,901. However, this subsector experienced a 2016 to 2017 loss of 2,279 employees. After the 12.4 percent decline, there were 16,044 employees in 2017 working at 1,855 business locations.

Across Maryland's Counties

After adding the most workers (288) from 2016 to 2017, Baltimore County had the largest finance and insurance sector in the state with 23,738 employees. However, with such a large base employment, the growth rate in Baltimore County was only the 10th best at 1.2 percent. Baltimore County finance and insurance workers earned the fourth highest wages in the state, with an average weekly wage of \$1,775.

Finance and insurance employees in Baltimore City earned the highest average weekly wage at \$3,876. The third largest finance and insurance sector in the state with 10,564 employees in 2017, Baltimore County's finance and insurance sector lost 463 workers from 2016 to 2017 (ranked 22nd out of 24 counties). The over-the-year decline of 4.2 percent ranked 16th.

In Somerset County, finance and insurance added employees at the fastest rate, with an over-the-year growth of 10.7 percent. The 12 new employees (ranked eighth) brought the smallest workforce of finance and insurance up to 124 workers in 2017. These workers earned an average weekly wage of \$762, the lowest in the state.

Demographics

40.1 percent of workers in finance and insurance had at least a bachelor's degree. Only 14.1 percent of workers had less than high school or unavailable educational attainment data. The workforce in finance and insurance is more educated than the state as a whole, with a 0.8 percentage point higher rate of workers with a bachelor's or advanced degree.

The majority of workers in finance and insurance were of the prime working age (70.2 percent). Workers below the prime working age (under 25) made up 6.6 percent of the finance and insurance sector, most likely due to the educational attainment requirements in the sector.

Finance and insurance is one of seven sectors with more women employees. 58.8 percent of workers in finance and insurance were women.

Real Estate and Rental and Leasing

Real estate and rental and leasing was the sector with the highest over-the-year growth rate from 2016 to 2017, at 5.2 percent. The 2,351 additional employees brought the 2017 employment total to 47,328. These workers made an average weekly wage of \$1,224.

All subsectors in real estate and rental and leasing grew from 2016 to 2017. The fastest growing subsector was rental and leasing services which grew at 11.3 percent, adding 1,279 employees. The 12,588 workers made an average weekly wage of \$1,062.



Figure 9 Real estate employed 34,429 workers in 2017.

Real estate was the largest subsector with 34,429 employees in 2017. Over the year, this subsector grew by 3.2 percent, adding 1,058 employees. These workers made an average weekly wage of \$1,280.

Lessors of nonfinancial intangible assets was the highest paying subsector, where workers earned an average weekly wage of \$1,616. In 2017, there were 311 employees after a growth of 14 employees from 2016 to 2017 (a 4.7 percent growth rate). 44 business locations made up this subsector.

Across Maryland's Counties

Not only was Montgomery County's real estate and rental and leasing sector the largest in the state with 11,369 workers, but it was also the county where workers earned the most with an average weekly wage of \$1,653. The 336 employees added from 2016 to 2017 was ranked third. Already starting with a large base employment, the growth rate of 3.0 percent was still highly ranked; it tied for 11th (out of 23 counties with available employment data) in the state.

Allegany County's real estate and rental and leasing sector grew at a rate of 44.0 percent from 2016 to 2017, the fastest in the state. The 80 additional employees (ranked sixth) added to the 18th largest real estate and rental and leasing workforce in the state with 262 employees. These workers made an 18th ranked average weekly wage of \$724.

In Baltimore City, real estate and rental and leasing added 1,171 workers from 2016 to 2017, the most in the state. This 21.6 percent growth ranked second. The workers in the third largest real estate and rental and leasing sector (6,593 employees) earned the third highest wages with an average of \$1,262 per week.

Demographics

Workers in real estate and rental and leasing were spread out across educational attainment levels, the largest group was workers with some college or associate's degree (28.1 percent). Workers in real estate and rental and leasing were 57.4 percent men.

65.3 percent of workers in real estate and rental and leasing were of prime working age. 26.7 percent of workers were above the prime working age and only 8.0 percent of workers were below the prime working age. However, about two-thirds of the workers of prime working age were under 45 years old.

Professional and Technical Services

Professional and technical services was the third largest sector in 2017 with an employment of 247,288. These workers made an average weekly wage of \$1,851. From 2016 to 2017, professional and technical services grew by 0.2 percent, adding 387 employees. This sector had the most establishments with 29,312 business locations. Professional and technical services has one subsector, also named professional and technical services.

Across Maryland's Counties

Montgomery County was the leader in professional and technical services in 2017, with the largest workforce (65,823 workers), the highest earners (average weekly wage of \$2,048), and the largest employment gain (988 workers from 2016 to 2017). Montgomery County led in three of the four measures assessed for this sector. The growth rate of 1.5 percent over the year ranked ninth out of the 20 counties with available employment data.

Worcester County professional and technical services grew at the fastest rate in the state with an over-the-year rate of 15.6 percent. The 111 additional workers ranked seventh in the state. Worcester professional and technical services had the 16th largest workforce with 823 workers. These workers had the second lowest average weekly wage, earning \$792.

Demographics

Professional and technical services was 56.4 percent male. Educational attainment is critical in the professional and technical services sector, with 44.1 percent of the workforce having at least a bachelor's degree.

Because educational attainment is paramount in this sector, the workforce tends to be over 25 years old. Only 6.1 percent of workers are below 25 years old.

Management of Companies and Enterprises

Management of companies and enterprises was the second highest paid sector in 2017, with an average weekly wage of \$2,309. After of a decline of 1.1 percent from 2016 to 2017 (281 jobs), there were 25,707 employees working at 698 business establishments in 2017. Management of companies and enterprises had one subsector, also called management of companies and enterprises.

Across Maryland's Counties

Montgomery County's management of companies and enterprises sector was the largest of the 15 counties with available employment data. The workforce had 7,101 workers in 2017. These workers earned an average weekly wage of \$3,027, the second highest in the state. From 2016 to 2017, Montgomery County's management of companies and enterprises sector grew by 258 employees, the most in the state. The over-the-year growth rate of 3.8 percent ranked seventh.

Talbot County was home to the fastest growing management of companies and enterprises sector with an over-the-year growth rate of 32.0 percent. The 56 new employees (ranked second) contributed to the 11th largest management of companies and enterprises workforce, 231 workers. These workers earned the second lowest average weekly wage at \$903.

Workers in Wicomico County earned the highest wages for management of companies and enterprises, with an average weekly wage of \$3,271. The seventh largest workforce, with 958 employees, Wicomico management of companies and enterprises grew by 1.3 percent over the year (ranked ninth), adding 12 employees (ranked seventh).

Demographics

Management of companies and enterprises was 53.4 percent female. It is also one of the most educated sectors with 33.7 percent of the workforce holding at least a bachelor's degree. Because of its educated workforce, the age distribution tends to be older in management of companies and enterprises with only 8.0 percent of workers below 25 years old.

Administrative and Waste Services



Figure 10 Waste management and remediation services had an average weekly wage of \$1,013.

Administrative and waste services employed 170,778 workers in 2017. This was 1,011 more workers than in 2016, a 0.6 percent growth. These workers made an average weekly wage of \$833 and worked at 12,086 business locations.

Administrative and support services was the largest of the two subsectors with 162,148 employees at 11,528 business locations. These workers earned an

average weekly wage of \$824. Growth in the sector was driven by growth in this subsector, which added 982 job over the year, a 0.6 percent growth rate.

Waste management and remediation services was the higher paid of the two subsectors with an average weekly wage of \$1,013. 558 establishments employed 8,630 workers in 2017. From 2016 to 2017, this subsector also grew (although less than administrative and support services), adding 29 jobs (0.3 percent growth rate).

Across Maryland's Counties

Out of 20 counties with available employment data, Montgomery County administrative and waste services ranked first in employment (32,305), average weekly wage (981), and over-the-year employment growth (1,264). The over-the-year percentage change of 4.6 percent ranked ninth in the state.

Somerset County administrative and waste services grew by 22.0 percent over the year, the fastest growth rate in the state. The nine employees added over the year ranked 14th. Somerset administrative and waste services had the smallest workforce (50 employees) and the lowest earners (average weekly wage of \$515) in the state.

Demographics

Administrative and waste services was 56.3 percent male. Almost double the amount of workers were above the prime working age (22.3 percent) than below the prime working age (11.4 percent). However, those in the prime working age were mostly on the young end of the prime working age range, with 36.9 percent of prime working age workers under 35 years old.

51.6 percent of workers had between a high school diploma and an associate's degree, indicating employers were seeking credentialed workers but did not require a four-year or advanced degree.

Educational Services

Educational services was the third fastest growing sector in the state, with a growth rate of 3.8 percent over the year. The 2,428 additional workers brought the total employment in 2017 up to 66,850. These workers earned an average weekly wage of \$1,078 and worked at 2,864 business establishments. Educational services had only one subsector, also called educational services.

Across Maryland's Counties

Baltimore City led (among 21 counties with available employment data) in employment level (26,755 workers), earnings (\$1,450 average weekly wage), and over-the-year growth (1,134 new employees from 2016 to 2017). The over-the-year growth rate was also in the top five, ranked fifth, at 4.4 percent.

Calvert County had the highest over-the-year growth rate at 13.5 percent. The 21 additional employees ranked seventh in the state. Calvert County's educational services workforce ranked 17th out of 21, with an employment level of 177 workers. These workers earned the 18th ranked wage with an average weekly wage of \$531.

Demographics

Educational services was another sector with higher educational attainment than the state as a whole, with 39.8 percent of workers having at least a bachelor's degree. As expected, the workforce tends to be older because workers enter this sector after attaining the required education. Only 10.4 percent of workers in educational services are under 25 years of age.

The majority of educational services workers were female, with a 64.0 percent share of the workforce in this sector.

Healthcare and Social Assistance

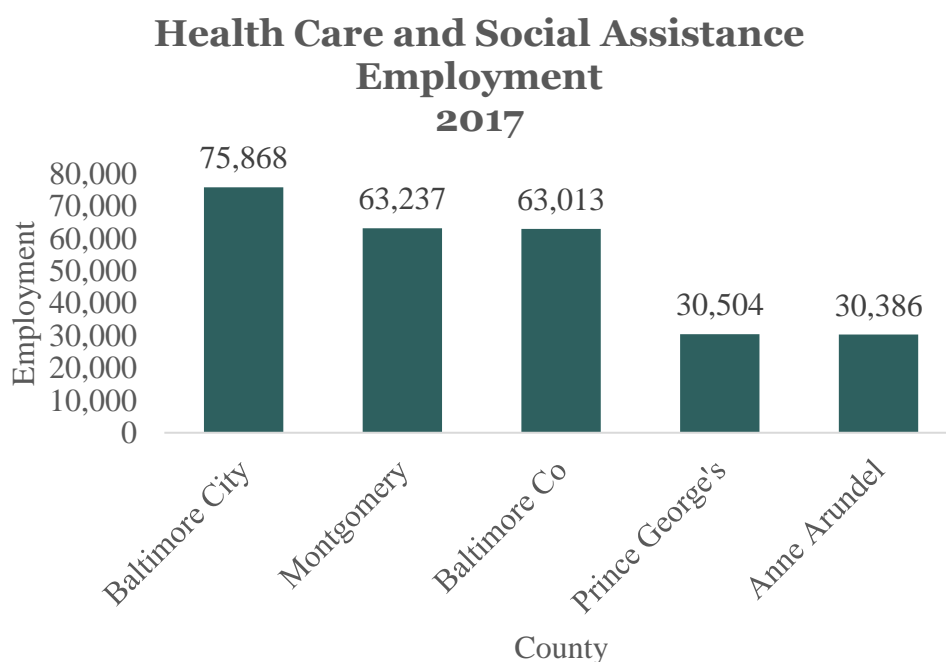
Healthcare and social assistance is Maryland's largest sector employing 369,355 workers in 2017. This sector will continue to be quite large as it grew by 2.1 percent from 2016 to 2017, gaining 7,603 employees. The employees in healthcare and social assistance earned an average weekly wage of \$1,013 and worked at 17,376 business locations across Maryland.

Ambulatory health care services was the largest, fastest growing, and highest paid subsector in the healthcare and social assistance sector. It employed 142,088 workers in 2017, who made an average weekly wage of \$1,235. From 2016 to 2017, this subsector added 4,958 jobs (65.2 percent of the growth in the subsector), growing at a rate of 3.6 percent.

Social assistance was a small portion of the sector, with an employment level of 50,724 workers in 2017. Social assistance grew at a rate of 2.0 percent from 2016 to 2017, adding 1,012 jobs. Workers in social assistance made an average weekly wage of \$574, about half of the average weekly wage for the workers in the three healthcare subsectors (\$1,083).

Across Maryland's Counties

Baltimore City health care and social assistance employed the largest workforce in the state with 78,868 workers. These workers earned the highest average weekly wage in the state with \$1,183. Adding the fourth most employees in the state (831) led to a growth rate of 1.1 percent from 2016 to 2017, ranked 14th out of 21 counties with available employment data.



Somerset County health care and social assistance grew the fastest in the state with an over-the-year growth rate of 6.3 percent. The 69 new employees ranked 13th. Somerset had one of the smaller employment counts in healthcare

and social assistance with 1,162 workers. These workers made the second lowest average weekly wage at \$701.

The health care and social assistance sector grew the most in Montgomery County, where 1,575 new workers entered the workforce between 2016 and 2017 for a growth rate of 2.6 percent, the eighth highest in the state. The 63,237 Montgomery County health care and social assistance workers made up the second largest workforce in the state. These workers earned the second highest average weekly wage for health care and social assistance workers in the state with \$1,051.

Demographics

Women make up 78.3 percent of Maryland's largest employment sector, health care and social assistance. 58.0 percent of workers in health care and social assistance have at least some college education. There are workers at every educational attainment level, indicating the breadth of occupations available within this industry sector.

As nearly triple the number of workers are above the prime working age (23.9 percent of workers) than below the prime working age (8.4 percent), there is some potential for a worker shortage as workers age out of the labor force. This is specific to healthcare and social assistance because potential workers can enter the work force without attaining an educational credential, yet there is a small percentage of workers below the prime working age. Recent changes in standards for health care occupations could explain more delayed entries into the labor force as potential workers attain the credentials to best position themselves in the future.

Arts, entertainment, and recreation

Arts, entertainment, and recreation was one of Maryland's smallest sectors, employing 46,140 workers at 2,464 business locations. Workers in this industry earned the second lowest average weekly wage in the state, making \$636. From 2016 to 2017, 675 new workers became employed in this sector, a growth rate of 1.5 percent.

With a workforce of 36,471 employees, amusements, gambling, and recreation was by far the largest subsector in arts, entertainment, and recreation. Workers in this subsector earned the second lowest subsector average weekly wage in the entire state, earning \$417. From 2016 to 2017, 605 new workers came into amusements, gambling, and recreation, a growth rate of 1.7 percent.



The subsector with the fastest employment growth in arts, entertainment, and recreation was museums, historical sites, zoos, and parks with an over the year growth rate of 2.4 percent. The additional 42 workers were a part of the 1,798 workers that made up the subsector in 2017. This workers made an average weekly wage of \$634. Workers in the performing arts and spectator sports subsector raised the average weekly wage in arts, entertainment, and recreation, with an average weekly wage of \$1,650. However, this subsector was a fraction of the size of the larger amusements, gambling, and recreation subsector, with 7,872 employees. An over-the-year growth rate of 0.4 percent added 30 new employees to the workforce.

Across Maryland's Counties

Montgomery County had the largest arts, entertainment, and recreation sector with 8,370 employees in 2017. These workers earned an average weekly wage of \$531, the sixth highest in the state. Over the year, Montgomery County arts, entertainment, and recreation grew by 309 employees, the most in the state, for a fifth ranked growth rate of 3.8 percent.

In Caroline County, arts, entertainment, and recreation grew by 16.0 percent, the fastest in the state. The eight additional employees ranked eighth in the state. Caroline County had the smallest arts, entertainment, and recreation sector with 58 employees, and these workers earned the second lowest average weekly wage in the state at \$221. Arts, entertainment, and recreation workers in Baltimore City earned the highest average wage with \$1,154 per week. The 6,091 workers made the third largest workforce in the state. The decline of 0.4 percent over the year was ranked 13th and the loss of 22 employees ranked 21st in the state.

Demographics

Arts, entertainment, and recreation is one of the youngest sectors in the state, with 28.7 percent of the workforce under the prime working age. 10.2 percent of workers are between 14 and 18 years old, second only to accommodation and food services. Because of the young workforce, there is a large contingent of workers without available educational attainment data (28.6 percent of workers). This is the sector closest to a 50/50 split between male and female workers, with 50.1 percent of workers being women.

Accommodation and Food Services

One of Maryland's largest sectors, accommodation and food services with 234,086 employees, is also the state's lowest paying sector, where workers earn an average weekly wage of \$414. From 2016 to 2017, 7,197 additional workers became employed in accommodation and food services, the second largest growth in the state, for a growth rate of 3.2 percent.



87.8 percent of workers (205,593) in accommodation and food services work in the food services and drinking places subsector, which is the largest subsector in the state. These workers earned the lowest subsector wages in the entire state with an average weekly wage of \$384. From 2016 to 2017, 2,827 new workers joined the food services and drinking places workforce, a growth rate of 1.4 percent.

Accommodation, the smaller of the two subsectors, was the fastest growing (18.1 percent) and the subsector that drove growth in the sector, with 4,370 new workers from 2016 to 2017. Workers in this subsector made more than 1.5 times more than did workers in the food services and drinking places subsector, earning an average weekly wage of \$631. There were 28,493 total employees in this subsector in 2017.

Across Maryland's Counties

Montgomery County accommodation and food services employed the largest workforce in the state with 35,545 workers. These workers also made the highest average weekly wage at \$486. Over the year, the 399 new employees added to Montgomery County's accommodation and food services sector ranked fourth in the state. The over-the-year growth rate of 1.1 percent ranked 14th.

Prince George's County was home to the fastest growing accommodation and food services sector with a 15.9 percent growth rate. The 4,411 new workers (ranked first) joined the second largest workforce (32,121 workers in 2017). These workers made an average weekly wage of \$479, the second highest in the state.

Demographics

The youngest sector in Maryland, accommodation and food services, was comprised of 11.0 percent workers under the age of 18. Workers under 25 accounted for more than a third of the entire workforce (33.5 percent). Due to the youth in the industry, a very

large portion of the industry had unavailable educational attainment data. Of those with educational attainment data, high school or equivalent is the most common educational attainment level. This industry was 52.5 percent female.

Other Services

Other services employed 91,477 workers in 2017, after a gain of 738 from 2016 to 2017. That was a growth rate of 0.8 percent. Workers in other services earned an average weekly wage of \$804 and worked at 19,471 business locations.

Personal and laundry services was the largest subsector in the other services sector. There were 32,444 workers in personal and laundry services that made an average weekly wage of \$541. From 2016 to 2017, 338 new workers became employed in personal and laundry services, a growth rate of 1.1 percent, the second fastest in the sector.

Workers in membership associations and organizations made the highest average weekly wage in the sector with \$1,144. After a growth of 1.7 percent (the fastest in the sector), 447 additional workers made the total employment in the subsector 26,368 in 2017.

Across Maryland's Counties

Montgomery County had the largest other services sector with 22,515 workers. These workers also had the highest average weekly wage for other services workers in the state, earning \$974. A decline of 0.4 percent from 2016 to 2017 ranked 17th. The loss of 80 employees ranked near the bottom of the state (22nd).

With 323 new workers added to the other services sector, Baltimore County grew the most in the state. With a workforce of 12,360 (second largest in the state), the over-the-year percentage growth was 2.7 percent, which ranked sixth. The workers in Baltimore County earned the seventh highest average weekly wage, at \$723.

Worcester County was home to the fastest growing other services sector, with a growth rate of 6.3 percent. The addition of 44 employees (seventh rank) brought the 2017 employment level to 1,774 (10th rank). These workers made near the lowest (22nd) average weekly wage of \$514.

Demographics

With a number of miscellaneous services and occupations in other services, education requirements are not specific and as such, the distribution of workers across educational attainment levels is quite even. Workers in other services are mostly of prime working age, 60.8 percent. There are more than double the amount of workers above prime working age (28.1 percent) compared to below prime working age (11.2 percent), which may be cause for concern in the future as workers age out of the labor force.

Conclusion

Maryland's overall economy continues to grow. Eighteen counties experienced an overall gain in private employment in 2017, while six counties experienced a small overall decline. However, the declines were more than offset by the robust workforce and economic gains across the significant majority of counties. This growth is supported by one of the most highly educated workforces in the nation.

Workers of all educational attainment levels have opportunities available to find stable well-paying jobs in an array of growth industries across Maryland. For each education level, these quality job opportunities are present in a variety of occupational fields.

As its population ages, Maryland will need to address potential shortages in the labor market. However, with an average population age of 28.1 years, changes in the structure of the labor force, and increases in productivity, Maryland is well positioned to continue its consistent trend of growing job opportunities, increased labor force participation, and lower unemployment rates.

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Demographics data for the sector-by sector analysis provided by the U.S. Census Bureau's Quarterly Workforce Indicators (QWI), using the average of the first three quarters of 2017.

Other Helpful Resources

LMI Central

<https://lmi.workforcegps.org/>

Maryland Growth Occupation Tool (GOT) and Growth Industry Tool (GIT)

<http://www.dllr.state.md.us/lmi/wiagrowthind/>

Maryland LMI Homepage

<http://www.dllr.state.md.us/lmi/>

Maryland Workforce Exchange

<https://mwejobs.maryland.gov/vosnet/Default.aspx>

North American Industry Classification System (NAICS)

http://www.bls.gov/iag/tgs/iag_index_naics.htm

O*NET (Standard Occupational Classifications (SOC))

<http://www.onetonline.org/>

Projections Central

<http://www.projectionscentral.com/>

Appendix A – NAICS Hierarchy

2 Digit NAICS	% Change	3 Digit NAICS	% Change	4 Digit NAICS	% Change
Agriculture, forestry, fishing and hunting	↑ 0.6	Crop production	↓ -0.1	Oilseed and grain farming	↑ 8.0
				Vegetable and melon farming	↓ -6.3
				Fruit and tree nut farming	↑ 4.3
				Greenhouse and nursery production	↓ -0.4
				Other crop farming	↓ -16.5
		Animal production and aquaculture	↑ 4.1	Cattle ranching and farming	↓ -2.3
				Poultry and egg production	↑ 2.3
				Sheep and goat farming	↑ 0.0
				Aquaculture	↑ 0.0
				Other animal production	↑ 21.1
		Forestry and logging	↑ 6.4	Logging	↑ 4.6
		Fishing, hunting and trapping	↑ 6.7	Fishing	↑ 6.0
		Agriculture and forestry support activities	↓ -3.1	Hunting and trapping	↑ 9.1
				Support activities for crop production	↓ -3.6
				Support activities for animal production	↓ -2.2
				Support activities for forestry	↓ -17.4
Mining, quarrying, and oil and gas extraction	↓ -1.9	Mining, except oil and gas	↑ 14.0	Coal mining	↓ -7.0
Utilities	↓ -0.8	Utilities	↓ -0.8	Nonmetallic mineral mining and quarrying	↑ 17.1
				Power generation and supply	↓ -1.0
				Natural gas distribution	↑ 2.6
Construction	↑ 0.7	Construction of buildings	↓ -2.1	Water, sewage and other systems	↓ -1.7
				Residential building construction	↓ -1.3
		Heavy and civil engineering construction	↑ 1.6	Nonresidential building construction	↓ -3.0
				Utility system construction	↑ 4.8
				Land subdivision	↓ -9.2
				Highway, street, and bridge construction	↓ -5.3
		Specialty trade contractors	↑ 1.5	Other heavy construction	↑ 7.6
				Building foundation and exterior contractors	↑ 3.0
				Building equipment contractors	↑ 0.9
				Building finishing contractors	↓ -1.1
				Other specialty trade contractors	↑ 5.0
Manufacturing	↑ 3.1	Food manufacturing	↑ 2.7	Sugar and confectionery product manufacturing	↑ 1.9
				Fruit and vegetable preserving and specialty	↓ -8.3
				Dairy product manufacturing	↑ 1.9
				Animal slaughtering and processing	↓ -4.4
				Seafood product preparation and packaging	↓ -4.3
				Bakeries and tortilla manufacturing	↑ 9.1
				Other food manufacturing	↑ 5.0
		Beverage and tobacco product manufacturing	↑ 3.1	Beverage manufacturing	↑ 3.2
		Textile mills	↑ 0.5	Tobacco manufacturing	↓ -5.4
				Fabric mills	↑ 2.7
		Textile product mills	↑ 4.4	Textile furnishings mills	↓ -0.4
				Other textile product mills	↑ 6.3

2 Digit NAICS	% Change	3 Digit NAICS	% Change	4 Digit NAICS	% Change
Manufacturing (cont.)		Apparel manufacturing	↓ -6.4	Cut and sew apparel manufacturing	↓ -7.6
				Accessories and other apparel manufacturing	↑ 23.3
		Leather and allied product manufacturing	↓ -2.1	Footwear manufacturing	↑ 21.9
				Other leather product manufacturing	↓ -50.8
		Wood product manufacturing	↑ 1.9	Sawmills and wood preservation	↓ -3.7
				Plywood and engineered wood product mfg.	↓ -3.8
				Other wood product manufacturing	↑ 8.9
		Paper manufacturing	↑ 1.0	Pulp, paper, and paperboard mills	↓ -3.7
				Converted paper product manufacturing	↑ 3.0
		Printing and related support activities	↓ -0.1	Printing and related support activities	↓ -0.1
		Petroleum and coal products manufacturing	↑ 1.8	Petroleum and coal products manufacturing	↑ 1.8
		Chemical manufacturing	↑ 10.6	Basic chemical manufacturing	↑ 21.6
				Resin, rubber, and artificial fibers mfg.	↓ -3.0
				Agricultural chemical manufacturing	↑ 3.6
				Pharmaceutical and medicine manufacturing	↑ 15.0
				Paint, coating, and adhesive manufacturing	↓ -3.8
				Soap, cleaning compound, and toiletry mfg.	↓ -0.8
				Other chemical product and preparation mfg.	↑ 5.7
		Plastics and rubber products manufacturing	↓ -2.9	Plastics product manufacturing	↓ -2.8
				Rubber product manufacturing	↓ -6.4
		Nonmetallic mineral product manufacturing	↓ -8.3	Clay product and refractory manufacturing	↓ -12.0
				Cement and concrete product manufacturing	↓ -7.3
				Other nonmetallic mineral products	↑ 3.5
		Primary metal manufacturing	↓ -13.7	Steel product mfg. from purchased steel	↓ -30.7
				Alumina and aluminum production	↓ -6.7
				Foundries	↓ -2.1
		Fabricated metal product manufacturing	↑ 3.5	Forging and stamping	↓ -0.9
				Architectural and structural metals mfg.	↑ 1.1
				Boiler, tank, and shipping container mfg.	↓ -2.2
				Spring and wire product manufacturing	↑ 68.1
				Machine shops and threaded product mfg.	↓ -0.3
				Coating, engraving, and heat treating metals	↑ 8.0
				Other fabricated metal product manufacturing	↓ -2.3
		Machinery manufacturing	↑ 4.6	Ag., construction, and mining machinery mfg.	↑ 6.1
				Industrial machinery manufacturing	↑ 3.9
				Hvac and commercial refrigeration equipment	↑ 4.2
				Metalworking machinery manufacturing	↓ -0.3
				Other general purpose machinery manufacturing	↑ 10.8
		Computer and electronic product manufacturing	↓ 8.0	Computer and peripheral equipment mfg.	↑ 2.9
				Communications equipment manufacturing	↓ -4.0
				Semiconductor and electronic component mfg.	↑ 8.0
				Electronic instrument manufacturing	↑ 12.1

2 Digit NAICS	% Change	3 Digit NAICS	% Change	4 Digit NAICS	% Change
Manufacturing (cont.)		Electrical equipment and appliance mfg.	↓ -2.5	Electric lighting equipment manufacturing	↓ -3.7
				Household appliance manufacturing	↑ 20.9
				Electrical equipment manufacturing	↓ -7.7
				Other electrical equipment and component mfg.	↑ 2.8
		Transportation equipment manufacturing	↓ -6.0	Motor vehicle body and trailer manufacturing	↑ 0.8
				Motor vehicle parts manufacturing	↓ -7.2
				Aerospace product and parts manufacturing	↓ -9.0
				Ship and boat building	↑ 14.3
		Furniture and related product manufacturing	↑ 1.9	Household and institutional furniture mfg.	↑ 5.0
				Office furniture and fixtures manufacturing	↓ -8.8
				Other furniture related product manufacturing	↑ 6.6
		Miscellaneous manufacturing	↑ 9.6	Medical equipment and supplies manufacturing	↑ 19.1
				Other miscellaneous manufacturing	↑ 2.4
Wholesale trade	↑ 0.5	Merchant wholesalers, durable goods	↑ 1.0	Motor vehicle and parts merchant wholesalers	↓ -5.2
				Furniture and furnishing merchant wholesalers	↓ -0.7
				Lumber and const. supply merchant wholesalers	↑ 6.5
				Commercial equip. merchant wholesalers	↓ -1.3
				Metal and mineral merchant wholesalers	↓ -1.4
				Appliance and electric goods merchant whls.	↑ 1.5
				Hardware and plumbing merchant wholesalers	↑ 11.9
				Machinery and supply merchant wholesalers	↓ -2.6
				Misc. durable goods merchant wholesalers	↑ 4.0
		Merchant wholesalers, nondurable goods	↑ 0.4	Paper and paper product merchant wholesalers	↓ -1.7
				Druggists' goods merchant wholesalers	↓ -8.1
				Apparel and piece goods merchant wholesalers	↑ 12.9
				Grocery and related product wholesalers	↑ 1.0
				Farm product raw material merch. whls.	↑ 14.3
				Chemical merchant wholesalers	↑ 2.0
				Petroleum merchant wholesalers	↑ 3.6
				Alcoholic beverage merchant wholesalers	↑ 5.0
				Misc. nondurable goods merchant wholesalers	↓ -3.3
		Electronic markets and agents and brokers	↓ -0.6	Electronic markets and agents and brokers	↓ -0.6
Retail trade	↓ -0.7	Motor vehicle and parts dealers	↑ 0.6	Automobile dealers	↓ -0.1
				Other motor vehicle dealers	↓ -1.1
				Auto parts, accessories, and tire stores	↑ 3.1
		Furniture and home furnishings stores	↑ 2.7	Furniture stores	↑ 3.4
				Home furnishings stores	↑ 2.0
		Electronics and appliance stores	↓ -3.3	Electronics and appliance stores	↓ -3.3
		Building material and garden supply stores	↓ -3.0	Building material and supplies dealers	↓ -4.6
				Lawn and garden equipment and supplies stores	↑ 7.8
		Food and beverage stores	↓ -0.8	Grocery stores	↓ -0.5
				Specialty food stores	↓ -3.6
				Beer, wine, and liquor stores	↓ -1.3

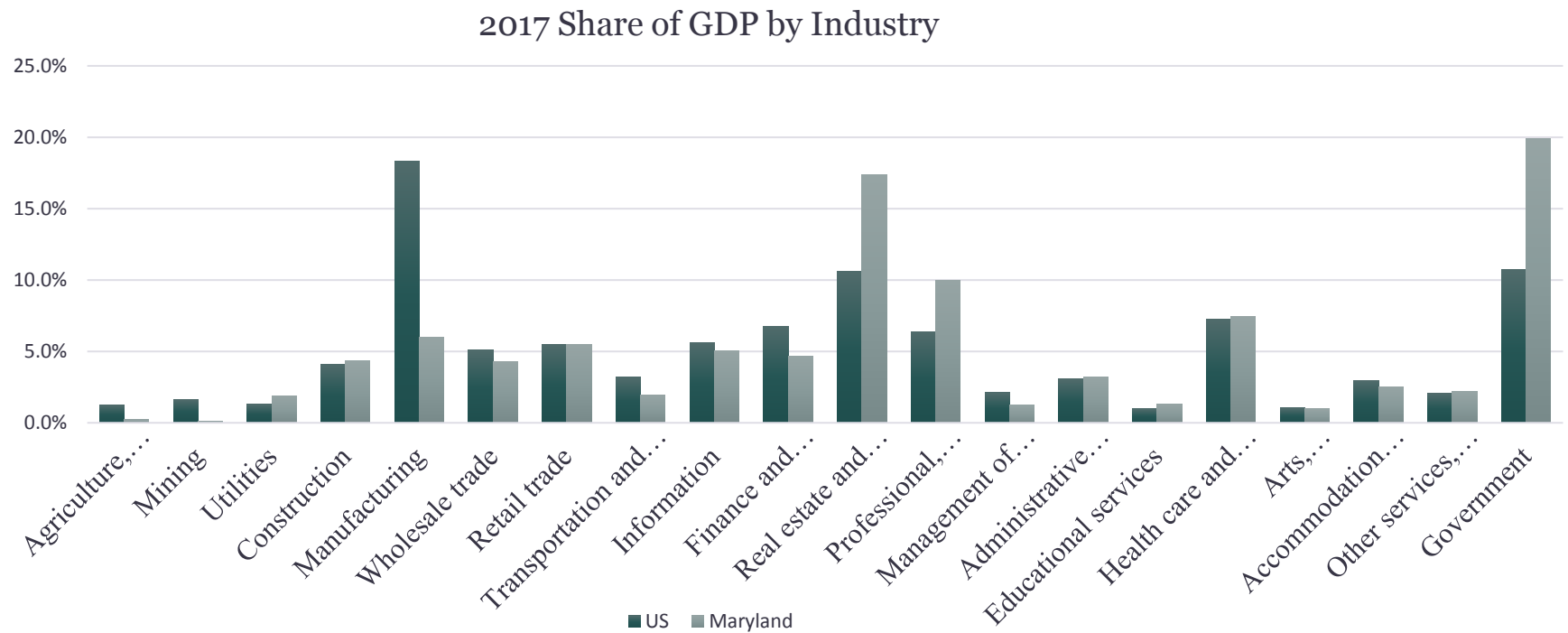
2 Digit NAICS	% Change	3 Digit NAICS	% Change	4 Digit NAICS	% Change
Retail trade (cont.)		Health and personal care stores	↑ 2.6	Health and personal care stores	↑ 2.6
		Gasoline stations	↓ -0.5	Gasoline stations	↓ -0.5
		Clothing and clothing accessories stores	↑ 6.0	Clothing stores	↑ 8.4
				Shoe stores	↑ 1.4
				Jewelry, luggage, and leather goods stores	↓ -1.7
				Sports, hobby, music instrument, book stores	↓ -3.3
		General merchandise stores	↓ -3.3	Sporting goods and musical instrument stores	↓ -2.5
		Miscellaneous store retailers	↓ -1.9	Book stores and news dealers	↓ -7.5
				Department stores	↑ 0.0
				General merchandise stores, including warehouse clubs	↑ 0.0
				Florists	↓ -6.0
		Nonstore retailers	↓ -9.9	Office supplies, stationery, and gift stores	↓ -2.6
				Used merchandise stores	↑ 3.5
				Other miscellaneous store retailers	↓ -3.9
Electronic shopping and mail-order houses	↓ -20.7				
Transportation and warehousing	↑ 3.9	Vending machine operators	↓ -6.3		
		Direct selling establishments	↓ -1.1		
		Air transportation	↑ 9.8	Scheduled air transportation	↑ 9.1
		Water transportation	↓ -7.9	Nonscheduled air transportation	↑ 34.9
				Sea, coastal, and great lakes transportation	↑ 4.7
				Inland water transportation	↓ -9.2
		Truck transportation	↓ -0.6	General freight trucking	↓ -3.0
				Specialized freight trucking	↑ 4.8
		Transit and ground passenger transportation	↑ 2.4	Urban transit systems	↑ 1.7
				Interurban and rural bus transportation	↑ 8.1
				Taxi and limousine service	↓ -1.6
				School and employee bus transportation	↓ -0.9
				Charter bus industry	↓ -8.6
				Other ground passenger transportation	↑ 11.2
				Scenic and sightseeing transportation	↓ -16.7
		Support activities for transportation	↑ 7.0	Scenic and sightseeing transportation, water	↓ -3.0
				Support activities for air transportation	↑ 15.2
				Support activities for rail transportation	↓ -18.1
				Support activities for water transportation	↓ -0.3
				Support activities for road transportation	↑ 3.2
				Freight transportation arrangement	↑ 6.2
		Postal service	↑ 0.0	Other support activities for transportation	↑ 42.1
		Couriers and messengers	↑ 3.0	Postal service	↑ 0.0
				Couriers and express delivery services	↑ 2.7
		Warehousing and storage	↑ 8.1	Local messengers and local delivery	↑ 4.8
Warehousing and storage	↑ 8.1				
Information	↓ -1.5			Publishing industries, except internet	↓ -2.4
		Motion picture and sound recording industries	↑ 5.8	Newspaper, book, and directory publishers	↓ -5.4
				Software publishers	↑ 1.4
				Motion picture and video industries	↑ 6.8
Sound recording industries	↓ -7.6				

2 Digit NAICS	% Change	3 Digit NAICS	% Change	4 Digit NAICS	% Change
Information (cont.)		Broadcasting, except internet	↓ -2.6	Radio and television broadcasting	↑ 3.0
		Telecommunications	↓ -2.7	Cable and other subscription programming	↓ -9.3
				Wired and wireless telecommunications carriers	↑ 0.0
				Satellite telecommunications	↓ -24.4
		Other telecommunications	↑ 10.2		
		Data processing, hosting and related services	↓ -9.1	Data processing, hosting and related services	↓ -9.1
		Other information services	↑ 15.4	Other information services	↑ 15.4
Finance and insurance	↓ -2.0	Monetary authorities - central bank	↑ 0.0	Monetary authorities - central bank	↑ 0.0
		Credit intermediation and related activities	↑ 1.4	Depository credit intermediation	↓ -1.2
				Nondepository credit intermediation	↑ 1.7
				Activities related to credit intermediation	↑ 10.1
		Securities, commodity contracts, investments	↓ -12.4	Other financial investment activities	↓ -18.4
		Insurance carriers and related activities	↓ -1.0	Insurance carriers	↓ -0.7
				Insurance agencies and brokerages	↓ -1.3
		Funds, trusts, and other financial vehicles	↑ 0.0	Insurance and employee benefit funds	↑ 0.0
Other investment pools and funds	↑ 23.3				
Real estate and rental and leasing	↑ 5.2	Real estate	↑ 3.2	Lessors of real estate	↑ 1.9
				Offices of real estate agents and brokers	↑ 4.8
				Activities related to real estate	↑ 3.6
		Rental and leasing services	↑ 11.3	Automotive equipment rental and leasing	↑ 5.0
				Consumer goods rental	↓ -6.7
				General rental centers	↓ -6.1
				Machinery and equipment rental and leasing	↑ 45.6
		Lessors of nonfinancial intangible assets	↑ 4.7	Lessors of nonfinancial intangible assets	↑ 4.7
Professional and technical services	↑ 0.2	Professional and technical services	↑ 0.2	Legal services	↑ 1.4
				Accounting and bookkeeping services	↓ -8.9
				Architectural and engineering services	↑ 0.0
				Specialized design services	↑ 4.0
				Computer systems design and related services	↑ 4.0
				Management and technical consulting services	↑ 4.7
				Scientific research and development services	↓ -7.0
				Advertising, pr, and related services	↓ -3.9
				Other professional and technical services	↓ -2.3
Management of companies and enterprises	↓ -1.1	Management of companies and enterprises	↓ -1.1	Management of companies and enterprises	↓ -1.1
Administrative and waste services	↑ 0.6	Administrative and support services	↑ 0.6	Office administrative services	↓ -2.1
				Facilities support services	↑ 7.1
				Employment services	↓ -0.8
				Business support services	↓ -2.6
				Travel arrangement and reservation services	↓ -11.3
				Investigation and security services	↑ 5.1
				Services to buildings and dwellings	↑ 2.0
				Other support services	↓ -1.0

2 Digit NAICS	% Change	3 Digit NAICS	% Change	4 Digit NAICS	% Change
Administrative and waste services (cont.)		Waste management and remediation services	↑ 0.3	Waste collection	↓ -1.9
				Waste treatment and disposal	↓ -0.8
				Remediation and other waste services	↑ 4.3
Educational services	↑ 3.8	Educational services	↑ 3.8	Elementary and secondary schools	↑ 2.5
				Junior colleges	↓ -72.5
				Colleges and universities	↑ 5.3
				Business, computer and management training	↑ 14.3
				Technical and trade schools	↑ 0.0
				Other schools and instruction	↑ 3.8
				Educational support services	↑ 1.1
Health care and social assistance	↑ 2.1	Ambulatory health care services	↑ 3.6	Offices of physicians	↑ 2.1
				Offices of dentists	↑ 1.0
				Offices of other health practitioners	↑ 5.3
				Outpatient care centers	↑ 4.4
				Medical and diagnostic laboratories	↑ 4.6
				Home health care services	↑ 7.2
				Other ambulatory health care services	↑ 4.0
		Hospitals	↑ 2.0	General medical and surgical hospitals	↑ 1.8
				Psychiatric and substance abuse hospitals	↑ 5.4
				Other hospitals	↑ 2.3
		Nursing and residential care facilities	↓ -0.6	Nursing care facilities, skilled nursing	↓ -2.5
				Residential mental health facilities	↑ 0.3
				Continuing care, assisted living facilities	↑ 0.9
				Other residential care facilities	↑ 4.1
		Social assistance	↑ 2.0	Individual and family services	↑ 3.2
				Emergency and other relief services	↑ 7.2
				Vocational rehabilitation services	↓ -2.4
				Child day care services	↑ 2.1
Arts, entertainment, and recreation	↑ 1.5	Performing arts and spectator sports	↑ 0.4	Performing arts companies	↑ 5.0
				Spectator sports	↑ 0.2
				Promoters of performing arts and sports	↓ -3.9
				Agents and managers for public figures	↑ 24.8
				Independent artists, writers, and performers	↓ -4.0
		Museums, historical sites, zoos, and parks	↑ 2.4	Museums, historical sites, zoos, and parks	↑ 2.4
		Amusements, gambling, and recreation	↑ 1.7	Amusement parks and arcades	↑ 2.6
				Gambling industries	↓ -7.0
Accommodation and food services	↑ 3.2	Accommodation	↑ 18.1	Other amusement and recreation industries	↑ 3.2
				Traveler accommodation	↑ 19.3
				Rv parks and recreational camps	↓ -8.3
		Food services and drinking places	↑ 1.4	Rooming and boarding houses	↓ -29.5
				Special food services	↑ 3.0
				Drinking places, alcoholic beverages	↓ -3.2
				Restaurants and other eating places	↑ 1.4

2 Digit NAICS	% Change	3 Digit NAICS	% Change	4 Digit NAICS	% Change
Other services, except public administration	↑ 0.8	Repair and maintenance	↑ 0.7	Automotive repair and maintenance	↓ -0.1
				Electronic equipment repair and maintenance	↑ 2.3
				Commercial machinery repair and maintenance	↑ 8.2
				Household goods repair and maintenance	↓ -1.1
		Personal and laundry services	↑ 1.1	Personal care services	↑ 0.2
				Death care services	↑ 1.2
				Drycleaning and laundry services	↑ 1.3
				Other personal services	↑ 3.0
		Membership associations and organizations	↑ 1.7	Religious organizations	↓ -2.5
				Grantmaking and giving services	↓ -1.2
				Social advocacy organizations	↑ 7.0
				Civic and social organizations	↑ 1.6
				Professional and similar organizations	↑ 1.2
		Private households	↓ -2.8	Private households	↓ -2.8

Appendix B - Share of GDP



Full Industry Names in order from left to right are:

- Agriculture, forestry, fishing, and hunting
- Mining
- Utilities
- Construction
- Manufacturing
- Wholesale trade
- Retail trade
- Transportation and warehousing
- Information
- Finance and insurance
- Real estate and rental and leasing
- Professional, scientific, and technical services
- Management of companies and enterprises
- Administrative and waste management services
- Education services
- Health care and social assistance
- Arts, entertainment, and recreation
- Accommodation and food services
- Other services, except government
- Government

Appendix C – Promising Occupations

High School Diploma

Occupation	Median Salary	% Change	Annual Openings
First-Line Supervisors of Office and Administrative Support Workers	\$58,952	6.86	3,844
Sales Representatives, Services, All Other	\$60,358	7.95	3,466
Carpenters	\$45,725	10.26	2,040
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$58,105	3.9	1,853
First-Line Supervisors of Construction Trades and Extraction Workers	\$67,319	10.99	1,832
Electricians	\$52,477	10.23	1,656
Plumbers, Pipefitters, and Steamfitters	\$54,750	9.76	1,441
Executive Secretaries and Executive Administrative Assistants	\$67,156	7.19	1,206
Insurance Sales Agents	\$48,768	6.3	841
First-Line Supervisors of Mechanics, Installers, and Repairers	\$65,723	5.48	841
First-Line Supervisors of Non-Retail Sales Workers	\$74,196	4.89	709
Operating Engineers and Other Construction Equipment Operators	\$47,075	10.11	683
First-Line Supervisors of Production and Operating Workers	\$59,948	2.58	677
Information and Record Clerks, All Other	\$47,671	4.4	634
Real Estate Sales Agents	\$44,563	3.83	602
Postal Service Mail Carriers	\$57,481	0.35	584
Claims Adjusters, Examiners, and Investigators	\$68,731	4.61	569
Inspectors, Testers, Sorters, Samplers, and Weighers	\$46,353	3.74	557
Bus and Truck Mechanics and Diesel Engine Specialists	\$50,305	4.5	475
Property, Real Estate, and Community Association Managers	\$67,648	0.39	465
Food Service Managers	\$61,111	8.46	448
Production, Planning, and Expediting Clerks	\$49,561	6.3	436
Telecommunications Line Installers and Repairers	\$69,262	11.7	426
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	\$49,629	8.39	402
Chefs and Head Cooks	\$44,785	8.34	379
Payroll and Timekeeping Clerks	\$49,907	7	347
Construction and Building Inspectors	\$56,087	4.08	319
Insurance Claims and Policy Processing Clerks	\$45,630	6.65	311
Industrial Machinery Mechanics	\$52,704	3.01	306
Mobile Heavy Equipment Mechanics, Except Engines	\$52,997	6.74	292
Brickmasons and Blockmasons	\$47,365	9.58	291
Machinists	\$49,604	1.59	289

Occupation	Median Salary	% Change	Annual Openings
Automotive Body and Related Repairers	\$49,086	6.87	276
Sheet Metal Workers	\$49,646	8.97	274
Welders, Cutters, Solderers, and Brazers	\$45,881	5.91	273
Postal Service Mail Sorters, Processors, and Processing Machine Operators	\$57,256	0.37	269
Loan Interviewers and Clerks	\$44,126	4.54	255
Excavating and Loading Machine and Dragline Operators	\$49,843	11.28	240
Security and Fire Alarm Systems Installers	\$48,994	9.2	230
Tree Trimmers and Pruners	\$44,010	8.88	209
Advertising Sales Agents	\$47,058	4.93	204
Procurement Clerks	\$48,536	4.72	189
Elevator Installers and Repairers	\$84,224	9.16	175
First-Line Supervisors of Protective Service Workers, All Other	\$52,057	5.63	172
Electrical Power-Line Installers and Repairers	\$69,304	3.19	166
Glaziers	\$46,891	9.74	160
Postal Service Clerks	\$58,557	0.39	141
Eligibility Interviewers, Government Programs	\$54,755	1.94	134
Structural Iron and Steel Workers	\$49,305	8.29	132
Police, Fire, and Ambulance Dispatchers	\$45,474	0.07	124
Control and Valve Installers and Repairers, Except Mechanical Door	\$56,030	8.01	120
Tax Preparers	\$45,083	6.84	120
Title Examiners, Abstractors, and Searchers	\$45,345	8.5	119
Maintenance Workers, Machinery	\$46,113	3.19	119
Transportation, Storage, and Distribution Managers	\$98,614	5.62	117
Computer Operators	\$44,545	5.59	115
Real Estate Brokers	\$65,987	4.5	114
Chemical Equipment Operators and Tenders	\$47,685	1.5	109
Surveying and Mapping Technicians	\$46,146	6.18	82
Crane and Tower Operators	\$55,850	11.52	80
Stationary Engineers and Boiler Operators	\$56,402	3.02	71
Locksmiths and Safe Repairers	\$43,859	13.61	67
Media and Communication Equipment Workers, All Other	\$101,119	2.24	58
Brokerage Clerks	\$53,857	10.48	56
Reinforcing Iron and Rebar Workers	\$47,226	11.35	55
Lodging Managers	\$61,957	1.13	53

Associate's Degree or Non-Degree Award

Occupation	Median Salary	% Change	Annual Openings
Heavy and Tractor-Trailer Truck Drivers	\$45,585	5.9	2,638
Automotive Service Technicians and Mechanics	\$47,445	6.63	1,606
Licensed Practical and Licensed Vocational Nurses	\$53,229	15.36	1,091
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$56,937	8.16	660
Paralegals and Legal Assistants	\$53,030	5.66	660
Computer Network Support Specialists	\$67,575	6.25	654
Web Developers	\$69,834	7.67	415
Electrical and Electronics Engineering Technicians	\$71,169	5.98	371
Telecommunications Equipment Installers and Repairers, Except Line Installers	\$54,956	8.32	367
Dental Hygienists	\$89,568	30.52	351
Medical Records and Health Information Technicians	\$46,247	12.97	304
Radiologic Technologists	\$66,704	16.52	289
Physical Therapist Assistants	\$59,729	26.78	257
Firefighters	\$57,054	0.23	250
Aircraft Mechanics and Service Technicians	\$74,372	8.5	204
Surgical Technologists	\$54,136	15.78	194
Legal Support Workers, All Other	\$59,790	3.61	160
Engineering Technicians, Except Drafters, All Other	\$86,449	2.58	150
Healthcare Practitioners and Technical Workers, All Other	\$91,964	10.43	137
First-Line Supervisors of Fire Fighting and Prevention Workers	\$87,706	0.05	121
Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$72,356	3.46	118
Architectural and Civil Drafters	\$58,803	8.44	108
Occupational Therapy Assistants	\$64,011	25.61	107
Mechanical Drafters	\$58,388	6.32	105
Respiratory Therapists	\$67,869	10	99
Civil Engineering Technicians	\$49,909	-0.3	85
Cardiovascular Technologists and Technicians	\$53,911	13.73	81
Captains, Mates, and Pilots of Water Vessels	\$86,967	9.6	81
Diagnostic Medical Sonographers	\$74,210	14.6	77
Magnetic Resonance Imaging Technologists	\$74,666	22.25	74
Desktop Publishers	\$50,489	8.67	59
Industrial Engineering Technicians	\$64,165	4.59	59
Environmental Science and Protection Technicians, Including Health	\$56,070	4.15	53
Funeral Service Managers	\$93,768	10.55	51

Bachelor's Degree

Occupation	Median Salary	% Change	Annual Openings
General and Operations Managers	\$119,428	6.91	4,338
Registered Nurses	\$74,117	11.45	3,350
Accountants and Auditors	\$72,895	6.68	2,869
Business Operations Specialists, All Other	\$85,042	3.96	2,110
Management Analysts	\$95,960	5.77	2,068
Managers, All Other	\$122,690	2.31	1,858
Software Developers, Systems Software	\$114,663	7.48	1,186
Human Resources Specialists	\$70,213	6.46	1,142
Elementary School Teachers, Except Special Education	\$65,738	7.52	1,096
Computer Systems Analysts	\$94,946	7.56	1,090
Market Research Analysts and Marketing Specialists	\$60,453	7.44	1,053
Computer Occupations, All Other	\$111,030	2.21	993
Software Developers, Applications	\$103,298	7.42	961
Network and Computer Systems Administrators	\$100,959	7.76	933
Medical and Health Services Managers	\$106,049	11.9	886
Financial Managers	\$134,303	6.04	882
Secondary School Teachers, Except Special and Career/Technical Education	\$67,837	7.51	830
Construction Managers	\$95,391	9.42	809
Training and Development Specialists	\$65,727	7.96	752
Computer and Information Systems Managers	\$146,263	6.29	724
Middle School Teachers, Except Special and Career/Technical Education	\$62,839	7.5	616
Financial Analysts	\$82,941	7.88	605
Cost Estimators	\$65,593	10.06	593
Compliance Officers	\$73,532	3.81	580
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$87,257	5.55	570
Civil Engineers	\$78,224	5.62	547
Child, Family, and School Social Workers	\$54,110	2.7	540
Personal Financial Advisors	\$77,527	6.81	536
Sales Managers	\$135,737	6.44	521
Administrative Services Managers	\$103,677	5.8	468
Logisticians	\$90,216	3.91	456
Computer Programmers	\$82,320	7.89	431
Graphic Designers	\$56,275	6.42	423
Financial Specialists, All Other	\$71,252	1.46	422
Public Relations Specialists	\$60,070	6.81	401

Occupation	Median Salary	% Change	Annual Openings
Computer Network Architects	\$113,245	7.88	397
Editors	\$57,284	5.75	379
Loan Officers	\$65,818	3.6	374
Electronics Engineers, Except Computer	\$123,221	5.16	368
Writers and Authors	\$71,684	3.38	366
Teachers and Instructors, All Other, Except Substitute Teachers	\$53,284	5.87	360
Architectural and Engineering Managers	\$139,052	5.34	353
Meeting, Convention, and Event Planners	\$54,632	7.98	350
Mechanical Engineers	\$98,885	4.3	348
Engineers, All Other	\$127,265	3.68	347
Securities, Commodities, and Financial Services Sales Agents	\$63,730	7.54	340
Electrical Engineers	\$100,142	6.46	321
Biological Scientists, All Other	\$95,759	2.03	302
Marketing Managers	\$135,491	7.12	291
Computer Hardware Engineers	\$123,231	6.03	281
Chemists	\$112,024	2.28	279
Biological Technicians	\$48,959	7.01	277
Information Security Analysts	\$108,000	7.61	268
Database Administrators	\$84,409	7.51	257
Social and Community Service Managers	\$70,229	7.77	243
Architects, Except Landscape and Naval	\$84,264	7	241
Community and Social Service Specialists, All Other	\$46,429	5.62	237
Health Educators	\$90,310	5.07	231
Graduate Teaching Assistants	\$46,282	7.52	228
Technical Writers	\$77,293	6.99	225
Social Scientists and Related Workers, All Other	\$100,248	3.93	218
Natural Sciences Managers	\$133,922	3.99	215
Operations Research Analysts	\$95,493	5.63	202
Special Education Teachers, Kindergarten and Elementary School	\$56,620	7.52	202
Chief Executives	\$199,747	10.06	193
Aerospace Engineers	\$122,736	4.56	190
Industrial Engineers	\$89,122	3.81	183
Microbiologists	\$94,833	5.1	180
Human Resources Managers	\$129,330	7.16	179
Environmental Scientists and Specialists, Including Health	\$74,601	3.73	179
Budget Analysts	\$84,989	3.69	177
Insurance Underwriters	\$78,678	6.24	175
Compensation, Benefits, and Job Analysis Specialists	\$71,522	5.83	174
Fundraisers	\$62,191	9.01	157
Producers and Directors	\$73,214	7.07	155

Occupation	Median Salary	% Change	Annual Openings
Interior Designers	\$57,958	5.48	152
Education Administrators, All Other	\$100,494	4.65	137
Kindergarten Teachers, Except Special Education	\$61,450	7.58	136
Purchasing Managers	\$134,416	3.79	134
Special Education Teachers, Secondary School	\$65,512	7.31	134
Education, Training, and Library Workers, All Other	\$50,717	6.97	132
Physical Scientists, All Other	\$128,312	3.03	130
Sales Engineers	\$120,355	7.01	122
Labor Relations Specialists	\$70,438	7.71	121
Special Education Teachers, Middle School	\$69,628	7.48	120
Social Workers, All Other	\$68,748	4.34	109
Industrial Production Managers	\$114,993	2.27	101
Social Science Research Assistants	\$50,266	10.63	97
Appraisers and Assessors of Real Estate	\$61,153	-3.38	96
Public Relations and Fundraising Managers	\$110,149	7.32	92
Environmental Engineers	\$93,970	6.56	87
Credit Analysts	\$63,672	5.91	87
Interpreters and Translators	\$66,801	7.45	85
Education Administrators, Preschool and Childcare Center/Program	\$46,275	7.85	85
Dietitians and Nutritionists	\$66,698	13.35	83
Multimedia Artists and Animators	\$58,657	2.52	80
Training and Development Managers	\$121,629	8.21	78
Adult Basic and Secondary Education and Literacy Teachers and Instructors	\$54,883	4.57	75
Clergy	\$45,945	8.04	71
Occupational Health and Safety Specialists	\$77,622	4.49	66
Advertising and Promotions Managers	\$104,682	6.44	65
Surveyors	\$61,027	8.05	64
Vocational Education Teachers, Postsecondary	\$46,095	2.05	61
Proofreaders and Copy Markers	\$48,232	6.78	59
Art Directors	\$75,436	4.26	56
Forensic Science Technicians	\$64,229	6.76	55
Materials Engineers	\$110,245	3.34	53
Atmospheric and Space Scientists	\$103,903	5.1	53
Museum Technicians and Conservators	\$53,933	2.71	53
Therapists, All Other	\$46,681	9.51	51

Advanced Degrees

Occupation	Median Salary	% Change	Annual Openings
Lawyers	\$105,450	2.84	651
Medical Scientists, Except Epidemiologists	\$99,260	9.58	444
Healthcare Social Workers	\$56,312	9.52	424
Educational, Guidance, School, and Vocational Counselors	\$61,048	9.13	389
Physicians and Surgeons, All Other	\$184,864	10.19	384
Health Diagnosing and Treating Practitioners, All Other	\$133,444	2.87	370
Instructional Coordinators	\$67,188	7.27	362
Physical Therapists	\$89,011	25.27	357
Pharmacists	\$120,916	7.92	322
Librarians	\$68,083	4.96	290
Mental Health and Substance Abuse Social Workers	\$44,104	15.6	287
Education Administrators, Elementary and Secondary School	\$110,419	7.43	256
Statisticians	\$103,627	2.65	239
Physician Assistants	\$103,634	22.2	228
Nurse Practitioners	\$104,286	24.43	222
Occupational Therapists	\$87,751	20.66	194
Dentists, General	\$135,734	30.23	187
Computer and Information Research Scientists	\$109,275	3.87	181
Clinical, Counseling, and School Psychologists	\$75,931	15.09	165
Biochemists and Biophysicists	\$79,806	8.62	162
Family and General Practitioners	\$195,371	20.67	133
Speech-Language Pathologists	\$83,414	14.91	124
Education Administrators, Postsecondary	\$109,059	7.64	121
Marriage and Family Therapists	\$49,098	12.11	120
Survey Researchers	\$82,428	10.88	115
Physicists	\$123,239	3.14	94
Urban and Regional Planners	\$72,596	0.48	83
Art, Drama, and Music Teachers, Postsecondary	\$67,392	7.75	74
Veterinarians	\$100,976	6.48	68
English Language and Literature Teachers, Postsecondary	\$68,284	7.49	59
Business Teachers, Postsecondary	\$103,010	7.53	58
Nursing Instructors and Teachers, Postsecondary	\$77,701	7.54	58
Internists, General	\$188,194	24.47	55
Education Teachers, Postsecondary	\$64,558	7.41	51



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